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THE OLD HOSPITAL

AND OTHER PAPERS,

BY

D. B. ST. JOHN ROOSA, M.D., LL.D.

SECOND REVISED AND ENLARGED EDITION

OF

"A DOCTOR'S SUGGESTIONS."

"I speak as my understanding instructs me, and as mine honesty puts it to utterance."—WINTER'S TALE.

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PREFACE.

FROM time to time in the course of his professional life, the author of the following pages beside his regular professional work has had occasion to write upon subjects not technical, but of interest to the community at large. The papers and addresses in which these subjects are discussed, with a few exceptions have been published in an isolated form and have been more or less widely circulated. Some of them have even had a large audience, but others have reached only those for whom they were originally prepared. Occasional and continued inquiries for certain of these articles have induced the author to venture upon the publication of all of them in a volume.

The central idea of the papers is an attempt to define and adjust the relations of the medical profession to the community which it serves. It is hoped however that this idea is not so prominent as to prevent the papers from being of some interest to all educated people, even if they do not

feel themselves particularly concerned in the main topic. Indeed the writer will have attained at least a part of his purpose in issuing this little book, if he shall succeed in securing readers who have hitherto believed that a doctor's point of view of affairs in general is necessarily a narrow one. It is true that our chief functions are to avert disease, and when this is impossible, to administer drugs and use the knife, but we are still men and brethren equally interested with our fellows of other callings in all that concerns the welfare of the community at large.

NEW YORK, *August*, 1880.

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THE OLD HOSPITAL

AND OTHER PAPERS.

BOSTON MEDICAL
JUN 27 1892.
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I.

THE OLD HOSPITAL.

THAT most veracious of chroniclers, Diedrich Knickerbocker, is said to have written his famous History of New York in a room of the Independent Columbian Hotel, "which commanded a very pleasant view of the new grounds on the Collect, together with the rear of the Poor House and Bridewell and a full front of the Hospital, so that it was the cheerfullest room in the whole house." The Poor House is gone, the Bridewell is gone, and now, alas! the old Hospital is gone. With what emotions, if New Yorkers have any emotions, must our old citizens have seen the sight which I saw to-day! What once was green sward, studded with trees, whose leaves have withered and opened for a hundred years, is now excavated earth, and at the hands of delving Milesians the ivy-entwined front of the New York Hospital is fast being demolished, and before these pages reach my readers,* there will scarce a trace be left of the venerable pile.

* Written in 1869.

Let us go back, and, while we may, tell the story of this land-mark of old New York. What we are about to write may sound like a lament, and so we would have it; for we believe that this hospital of such glorious memory for its relief afforded to the sufferings of humanity, has been needlessly sacrificed to the Vandalizing spirit of *new* New York. Were it the Emperor of Erie, Mr. James Fisk, Jr., or men of his ilk, who had razed these foundations, we perhaps should have felt no surprise; but when we consider that those who have done this are the governors of the institution, men of historic name in New York, we cannot but be amazed at the deed of desecration, which we see committed at their command. It is said, and it is undoubtedly true, that the hospital did not support itself. But what reasonable man expects a hospital to be self supporting? When it is, it is no longer an hospital, but a boarding house, where medical attendance is included in the bill. Shall we build an hospital for the reception of well-to-do tradesmen, who find it a little inconvenient to be ill at home, and for bachelor millionaires who have no home? Shall we place it among the private residences of the city, or in the green fields of Westchester, so that an injured patient may die before he reaches a ward?

It cannot be denied that the location of the old hospital, or of the *City Hospital*, as it was very often called, was one of the very best that could be found for the purposes for which it was intended.

In close proximity to the wharves and piers, where the mighty engines of commerce are constantly crushing so many in their revolutions, in the very heart of lower Broadway, with its countless sources of accidents, in fact very accessible to the places where half the casualties and the crimes of the metropolis occur, could it have remained where it was, it would have been for the next hundred years, as it has been for the last, a true place of succor, or when it must be, of calm death for the suffering poor.

If the money for the support of this time-honored and successful charity were not forthcoming by ordinary means, such as appeals to the State and City Legislatures, extraordinary ones should have been adopted. Whatever may be the faults of New Yorkers, want of liberality certainly cannot be said to be among them. We have carefully read the two especial reports which the governors have caused to be printed in regard to the removal, and we fail to find in them either any evidence of its necessity, or any proof that any vigorous steps were ever taken to obviate any supposed

need of this kind. The policy of the governors seems to have been a drifting one or, Micawber-like, until at last it has culminated in this tearing-down process, which was undoubtedly a great surprise to those who vainly imagined that the Hospital had grown into one of the best possible locations for its needs.

When the city of Paris removes the *Hotel Dieu*, for reasons that do not at all apply to our magnificent old hospital, surrounded as it was by green grass on every side, a new one is erected in the very centre of the city on a beautiful island, and on land most valuable for other purposes; but the governors of the New York Hospital tear their buildings down, to allow the Board of Charities and Correction to replace it by a receiving ward, which will be the only hospital in the lower and middle part of the city. But we cannot dwell longer on this theme, and we must leave the subject of the removal, or rather of the annihilation of the New York Hospital, with the final remark that many believe that it was unnecessary, and more than that cruel to those who have a right to expect that the civilization which demands the sacrifice of health and limb, yea, even of life in its service, will furnish an asylum in the place where it is needed, for the amelioration of their woes. But, old building, hail! and farewell! and now for thy epitaph.

The charter of the New York Hospital was granted in 1770, when "George III., by the grace of God, of Great Britain, France and Ireland, King, Defender of the Faith," sent "greeting to his loving subjects, Peter Middleton, Samuel Bard, and John Jones, physicians, by their humble petition presented unto our trusty and well-beloved Cadwallader Colden, Esq., Lieutenant-Governor," and granted a charter for "the society of the Hospital in the city of New York, in America." Among the names to whom this trust was conveyed, besides the officials of the city, are many that are still familiar and dear to New York. How Knickerbocker-like they sound! Watts, De Lancey, Livingston, Duane, Lispenard, Bayard, Rutherford, Colden, Van Cortlandt, Morris, Bogert, Clarkson, Beekman, Provoost, Duryea, Stuyvesant, Verplanck, Roosevelt, De Peyster, Rutgers, Le Roy, DuBois, and Buchanan. These were the honored men of New York, who just about one hundred years ago undertook the work of founding the New York Hospital. What a pity that the present governors did not wait at least till the cycle was complete, before beginning their work of destruction! A proper poetic sense, would have constrained them to wait another year, when they might have celebrated the centenary by putting the axe to those old trees, planted by their forefathers

in the vain hope that they might be left until the Father of Nature should cause them to die.

The twenty-six governors held their first meeting on the 28th of July, 1771. Considerable contributions were made through the exertions of Dr. John Fothergill and Sir William Johnson, eminent physicians in London, by many of the inhabitants of that city, and other places in Great Britain, and in 1772, the Legislature granted an annual allowance of eight hundred pounds. In 1773 five acres of ground were purchased of Mrs. Barclay and Mr. Rutgers, and the foundations were laid on the 27th of July of the same year. On February 28, 1775, when the building was almost completed, it was nearly consumed by fire. The war of Independence prevented the completion of the edifice, but it was used during the war for barracks, and occasionally as an hospital. It was not until January 3, 1791, that the house was in a proper condition to receive patients. It is at this point that the real existence of the hospital, begins. The building thus erected was the one fronting the main entrance on Broadway. Some additions and improvements were made in it, however, from time to time. It was known as the Main Building. In it were the apothecary's shop, the office, the dining-rooms, and the governors' rooms, where met the various committees. In its

amphitheatre were achieved the surgical triumphs of Wright Post, Kearney Rodgers, Valentine Mott, and Alexander H. Stevens, names which have made the surgery of our country respected throughout the world. The south building on Duane street was erected in 1853, replacing one that was erected in 1806. This noble building was in many respects a model of hospital architecture. The north building on Worth street was erected in 1841. The main and north hospitals are now torn down, while the south is to be left cooped up by a solid block of ware-houses, with noisy streets on every side. It certainly will not be an hospital when thus situated. House of Alarms would be a more appropriate name.

We cannot imagine why all the buildings were not torn down at once. "If it were done when 'tis done, then 'twere well it were done quickly."

It should be stated that the Bloomingdale Hospital for the Insane on the borders of the Central Park, is also part and parcel of the Society of the New York Hospital. It does not, however, fall within the scope of this paper to give any more than this passing notice of that excellent asylum.

Since 1829, more than one hundred thousand patients have been treated in this hospital, of whom more than seventy thousand have been cured,

while ten thousand have died. More than nine thousand were relieved. The remainder were discharged at their own request, or eloped. There are no published records prior to 1829. In the year 1868, two hundred more patients were treated than in 1867.

There is a valuable library of more than eight thousand volumes, relating to medical science, connected with the hospital. Just one word more about the destruction of this hospital and we pass on to give a sketch of the inner life in such an institution, as seen by a member of the resident medical staff.

As the writer was lately passing the remains of the old building in a Broadway stage, a young lady sitting near him, on seeing the ruins,—the workmen were just pulling the ivy from the front wall,—exclaimed, "That is the work of those horrid doctors; they ought to be strung up." Now this expression is but a fair type of what is generally believed by the people of our city and country who do not have accurate information as to just how much the doctors have to do with the management of such hospitals. The fact is that the Physicians and Surgeons of the New York Hospital have no duties in connection with the institution, except the care of the sick. There is not a physician in the Board of Governors. It is true that

this Board confers with the physicians, and asks advice as to the care of the institution; but so far as is shown by the two reports before referred to, while giving a great deal of deference to the opinions of medical men who died some seventy years ago, they paid no attention to the advice of their own board; at any rate, to the governors, and not to the "horrid doctors," should be ascribed the blame or awarded the credit of the tearing down.

This hospital would not have had an existence, without the efforts of the physicians, Doctors Bard, Jones, and Middleton, who founded it. It could not have been sustained if the labors of the long line of physicians and surgeons who visited the sick within its walls had not been gratuitously given, and yet medical men have not participated in its management.

Many of the mistakes in the financial care and success of such hospitals may have depended on the want of coöperation between the medical staff and the directors. We believe it to be a radical error in the management of such institutions that the doctors are excluded from their full share in the directorship. The best hospitals we have ever had in this country, were those that were exclusively controlled by the medical officers of the United States Army. We disclaim any

idea, however, in this article of speaking by the authority of the medical staff of the hospital. We merely know that the demolition has been undertaken independently of them, and that the financial or general management is in no sense shared in by them.

Among the names of those who have served this hospital, we find some that have much more than a New York reputation: Wright Post, Samuel L. Mitchell, David Hosack, Alexander H. Stevens, Valentine Mott, John C. Cheesman, J. Kearney Rodgers, Joseph Mather Smith, Gurdon Buck. These were honored names throughout the land, and their successors, who are watching the throes of dissolution, have quite sustained the reputation of the medical and surgical staff.

It is a common mistake to suppose that a hospital is a gloomy place. Gloom was not a common idea among the dwellers of the old pile, sad as were many of the scenes that there transpired.

The patients lay in cheerful wards, chatting with each other; they were covered by the whitest of bed-spreads, and attended by cheerful nurses; the most of them had better food than they ever had before in their lives, and, what is better still, the great majority were getting well. Some of them, I am sure, relished so simple an injury

as a broken leg, as an excuse for a good vacation. There is a story told that a man, who was admitted to the hospital in consequence of having been bitten by a rattlesnake, and who, in accordance with the then idea of proper treatment, was kept constantly plied with brandy, remarked, on paying his bill and going out, that it was the cheapest and best hotel he was ever in, since he had all the liquor he could wish, and was drunk for two weeks, all for the small sum of ten dollars.

The nurses were not unhappy, certainly not the females. They grew fat and lusty in the service, as the result of their good living and ample opportunities for gossip. Some of them served the hospital for twenty years, and then were pensioned off with the dignity of a room to themselves, and nothing to do. How some of them used to make the medical students stand around! Tradition says, that years ago one of them applied a strap vigorously to the shoulders of a luckless wight, who, in his anxiety to hear the clinical lecture, leaned upon and rumpled one of her best made beds, on which castigation the grave attending surgeon smiled approvingly. The Superintendent, certainly, was not miserable, for he was an autocrat of the first water, and on the most confidential relations with the gov-

ernors. There was one person about the institution who may have been unhappy, that is "the man at the gate." He certainly had enough care to make him so. Tuesdays and Fridays, at three o'clock, the gates were open to all who had friends in the hospital. They began to gather about noon, and sometimes in such force as to make the gate-house look as if it were in a state of siege. Before these visitors entered, they were obliged to yield up all surreptitiously introduced cognac, and whisky, apple-jack, cider, cigars, oranges, and peanuts, with which creature comforts they intended to solace the tedious hours of their suffering friends. It was an amusing sight to look in upon the gate-house after such a foray, upon the first-class grocery establishment which had been set up from the pockets and skirts of anxious visitors. On other days than those mentioned, only the friends of the Superintendent, of the House Staff, medical students, high officials, or those who had special passes from the doctors were allowed to enter. It was remarkable, however, that frequent attempts were made to pass, by those who fulfilled none of these requirements. Distinguished gentlemen, claiming all sorts of relationship with all sorts of dignitaries, from the Governor of the State down to the keeper of the City Hall would daily apply for admission, but "*John*" was

inexorable. Occasionally, indeed, he had been humbugged so often, "the man at the gate" denied admission to really distinguished strangers or citizens, whom curiosity had led up the broad walk between the old trees to the gate-house, which prevented any nearer approach to the famous old place.

John's contentions and watching were finally ended by his death, and since then the name of "the man at the gate" has lost all its force.

The doctors, we mean the house-doctors, were not unhappy; there were nine of them, solemn young men, so young in appearance that we remember that many an indignant patient, on seeing his medical attendant, would vow that "none of them 'ere assistants should ever practice on him."

It should be known that what are called the attending physicians or surgeons are eminent practitioners in the busy city about, who visit the hospital daily, give the clinical lectures, perform the great operations, and direct the treatment of the serious cases. The "young doctors," as the patients call them, who are the resident staff, are divided into three grades, those of each grade serving a term of eight months. All these young men, however, are graduates in medicine, having spent three years in its study before being admitted, and then only after a successful competitive

examination. In the first eight months the "junior walker," as he is called, has no responsibility, but he receives his orders from the house-surgeon or physician, according as he is on the medical or surgical "side." He dresses wounds, bandages limbs, cups, copies cases into a note-book, lunches every day at the expense of the hospital, but goes home at night.

The senior walker dresses fractures, writes the history of cases as he takes it from the patient's lips, which the junior copies, while the house-surgeon, the only one of the three who lives in the hospital, has the general supervision of all the patients, subject, as before indicated, to the direction of the attending physician, or "head doctor." He often, however, has to act, in cases of emergency, requiring considerable experience and skill, which he has acquired in the previous sixteen months of pupilage. It will thus be seen that every precaution was taken by the by-laws of the hospital, to secure careful and skilful attention of the sick. There were three sets of these doctors, two on the surgical and one on the medical side, to care for about three hundred and seventy-five sick.

Let us now go through with a day as passed by a house physician or house surgeon of the New York Hospital. We may suppose that the

young gentleman has breakfasted in the pleasant dining-room, from whence he has gone into the office, whose windows look out upon Broadway, where the clerk, a rare gentleman of the old school, has regaled him both with the odor of a fragrant Havana, and with some very well-told stories of the ancient *régime*, when New York was so small that all the good fellows knew each other; and that he has looked out and seen his two assistants coming up the walk from their up-town boarding-house, or home. He then buckles on his armor, or, in plain English, he seizes his case of instruments, and with the senior and junior walker at his side, he starts on his rounds. The Emperor of Russia, the Viceroy of Egypt, the President of the United States, never felt more acutely the weight of supreme power than did the house-surgeon, or physician, of the New York Hospital, as he was about to pass into a realm over which he was the undisputed master.

How the doors fly open! Obedient nurses greet him, towel in hand, and he passes from bed to bed.

"Well, John, how do you feel this morning? Nurse! what sort of a night did the man pass? What did he eat for breakfast?" and at the same time feeling his pulse, putting his hands on his face to note the temperature of the body, while the senior walker is making rapid notes; these are

the questions, and this is the manner in which our young doctor attends his patients. No nonsense, no fuss, no haste, but calm sympathetic questions and gentle manipulations.

Perhaps it is a stab, or perhaps a broken limb, or, if the case be in charge of the house-physician, rheumatism or fever. A card at the head of the patient's little iron bed tells what diet he is having, what stimulant, if any, he is taking, and the doctor adds a beefsteak or chicken soup, or takes off a bottle of porter, or in his own way continues or changes the treatment. If he prescribes any medicine, he writes the prescription in a note-book, which goes afterwards to the apothecary's. And thus he goes through the seven or eight wards under his charge, seeing each patient personally, paying due regard to the ventilation and cleanliness, administering praise or rebuke to the nurse, advising with his assistants about the dressing of the injuries, noting in his mind the cases to which he will ask the particular attention of the attending surgeon when he comes at noon, until about 11 o'clock, when his round is finished. Then the work of the senior and junior walker begins. They follow the house-surgeon, but in a much less ceremonions manner, and carry out his directions as to bandaging wounds, dressing fractures, and so forth.

The house-doctor has gone back to his room, where he receives calls of various kinds, now from a patient whom he has ordered to go out, and who wants his board signed, the one which was at the head of his bed, with his name, date of entry, and his disease. On this the doctor writes 'D. C.," that is, discharged cured, or, "D. R.," discharged relieved, or perhaps it is brought to him by the nurse, who says that its owner was out on pass yesterday, and failed to come back, and then "eloped" is written, or perhaps he is obliged to write "died."

It may be a policeman who calls, with the compliments of Judge Finnigan of the Police Court, who wishes to inquire how that man is who was brought into the night ward stabbed, last night, or (if it was in the palmy days of the volunteer fire companies) who was hit over the head with a speaking trumpet. The Judge desires to know the man's condition, in order to bail the assailant, if the wound be not dangerous. Perhaps the caller is the Coroner; he asks when the doctor will be ready to make that *post mortem*, the technical name for an examination of a dead body; or it is a nurse, who says that Hans Breitman, in ward 6, demands an extra beer to-day, which he claims was ordered for him, but which the nurse cannot make out. Hans was probably right, being the

more interested of the two. Or perhaps it is the senior walker, who requests his chief to come and look at Mulligan's fracture, now that it is undressed. It may be "Aunty," an old colored nurse. Here we must pause an instant. "Aunty," as black as any black could be, dear old Aunty, the doctors' pet, who died in the service of the hospital, after many years of faithful work,—no history of the New York Hospital would be complete that did not mention her. An ardent abolitionist, she was yet particularly sweet on any Southerner, who might chance to be a house doctor, lest she should hurt his feelings by the obtrusion of her peculiar and obnoxious sentiments. Aunty nursed one doctor through the small-pox, another in typhoid fever, and was handed down from generation to generation as one to be carefully tended and humored. Her services were manifold. She mended the doctor's clothes, she lent him money, and sold him pickles and blackberry brandy. In the little cubby-hole off the ward, over which she presided, was a grotesque collection of chinaware, a daguerreotype gallery of the various doctors, and a full length picture of *John Brown*, who became one of her patron saints after the affair at Harper's Ferry. Aunty was an earnest Christian, and calmly passed to her rest a few years ago. At her funeral at St. Peter's Church, amid the throng of her

own race, who had assembled to pay the last tribute of respect to the old lady, were to be seen many of the governors, and officers of the institution which she had served so long and well.

Now comes a visitor in the shape of some particular friend of some poor fellow in one of the wards, who wants to know what the doctor *really thinks* of his case; or perhaps it is "Old Jimmy," the man at the Duane-street gate where the carriages enter, who knocks at the door, and exclaims, "A man with a broken leg," or, "A man fell down a hatchway." No matter what occurs, old Jimmy's face is perfectly calm, unless it is a case of bleeding, when his pipe stays a little longer from his mouth, as he says, "He's bleeding, sir, and they'll be wanting you quick." Then the doctor goes out, glances at the case, and if it be serious, and require immediate attention, he passes with it into the ward, carefully examines the wound or injury, revives the patient with brandy or the "heater," that is, a hot-air bath, if suffering from what the medical men call shock, ties the bleeding vessels, calms the friends, tells the policeman the nature of the injury, and passes out. Thus the morning goes on, until a quick step, and a brief knock, and in comes the attending surgeon, the grand medical Mogul. "Any thing new to-day, doctor?" he asks. "Yes, sir,

a man has just come in with a stab in the chest," or, "There is a railroad accident case," or, "Only a fracture, or a burn."

And then the students, who have been gathered in the halls, follow the doctors into the wards, where the round is made once more, the clinical lecture is given, and perhaps an operation performed in the amphitheatre; but, at last, all is done; the students disappear, the attending surgeon stays behind a few moments for a word or two with the house doctor, and at last the door shuts, and the poor fellow knows that if it is his week for the night ward, or if he has many serious cases, his work is but half done. But first he dines, often not till five on lecture-days, although the hospital hour for dining is half-past two. He then goes out for a walk, and at evening makes another, this time a hurried, visit to the wards, takes tea, smokes a cigar, perhaps; and at ten o'clock the Broadway gate is shut, the watchman begins his rounds about the wards to see if the nurses are at their posts, and the "night ward" begins. Eleven, twelve, one, and then a rap at the doctors door. "A man in the night ward, doctor!" "What is it?" "I dont know; he's bleeding, sir." With hastily donned slippers and dressing gown, down goes the house-surgeon to the night ward, a room in the lower part of the main house,

with four or more beds, for the reception of patients who are brought in between 10 P. M. and 6 A. M. There he is apt to meet the apothecary. an educated Irish gentleman, himself a good surgeon, who lives in the house. What sights that old night ward has seen! There lies some rowdy quivering in his last gasps, stabbed nigh to the heart by an infuriated fellow, while his lately drunken, but now sobered friends stand by, for once shocked and appalled. Perhaps it is some poor wretch, who, after having made himself a beast with rum, has lain down in his vile den to sleep off his debauch, while his clothes have caught fire from the stove, or the over-turned kerosene, until he has been terribly burned, literally charred. Still unsobered, he lies cursing and shouting until the breath becomes feebler, and the poor soul passes away to give up its account. It may be that it is one whose dress and air show that he has a position in life better and higher, but whose steps have run to evil, and who is here the victim of a midnight carousal. Or it is

> "One more unfortunate
> Weary of breath,
> Rashly importunate,
> Gone to her death,"

but who now would call back the spirit she had just before endeavored to set loose, as she wildly

calls for the antidote that may save her life Life! why should she wish to go back to it? With her it means but a career of shame and suffering. But at last the work is done, and the doctor goes back to his bed, perhaps to be called again by the exclamation, "This man is dying, sir, in ward 4;" or, "Mrs. Smith is keeping the whole ward awake by her talking and says she won't go to sleep, unless I give her another draught;" or, it may be that the doctor is keeping vigils over some poor fellow, to whom it is necessary to give so much opium, that he must be carefully watched lest he become narcotized. If so, every hour or two he passes quietly into the ward, counts the pulse, made wondrous slow by the drug, puts his hand on the chest, which heaves so infrequently that there is a solemn pause between the respirations, notes the number by his watch, and with a grim smile of satisfaction that his dangerous remedy is so faithfully doing its work of subduing the action of that heart, which would else run riot and wear out its victim, creeps back to his room. And so, at last, the morning comes, and another day is to be gone over: and so on, for his term for eight months, until the poor fellow gives up his honors and his cares, to go out and tread the quieter walks of private practice, while the senior walker, gladly,

in his turn, goes through with the same earnest and exciting life.

Many of the incidents of the daily life in such an institution are thrilling enough to form the bases of romances; but the events succeed each other with such rapidity in a large hospital, that they receive very little attention after they have once passed by, and the actors and witnesses are too busy to record them. Thus they become a part of the unwritten dramas of the world.

The ward devoted to the sufferers from *mania à potu*, or delirium tremens, the "Del. Trem." ward, as the nurses and house doctors were apt to call it, would alone furnish scenes for the pencil of the artist, which might surpass those of Hogarth or Holbein, so frightful is the demoniac appearance of man when the victim of his passions, and overcome with awful dread at the horrid shapes which his diseased brain has pictured. The visitor to such a ward, when it is well filled, would almost imagine that he had entered one of the portals of the region of the lost.

One poor victim lies muttering to himself, and constantly picking his bed clothes, now and then rising up and fixedly staring, with horror delineated in every feature, on some fancied demon emerging from a crevice or corner. Another is hurling back, with awful blasphemy, the taunts and jeers with

which his imaginary enemy is tormenting him, while in the grated room off the main ward, reserved for the most violent cases, a poor fellow is rushing madly about, fighting a mortal combat with what seems to him a real enemy. The strait jacket and well-padded walls, however, protect him from doing himself any harm, while the strong men chosen as nurses for these patients cow them down with a steady look, and preserve a Satanic order in this pandemonium. Occasionally, however, a sufferer from the effects of strong drink, sees gentle spirits and dreams delightful dreams, instead of fearful shapes and imaginations. A smile is constantly playing on such lips, and he seems like a child dreaming of angels. I well remember a poor artist, who had often suffered from delirium tremens, who told me that in his hours of insanity he saw images that Raphael or Angelo might have traced, and that visions of artistic beauty floated before him, which he could never execute in his sober hours, and yet the period of remorse and intense physical suffering came to him all the same.

It is said that one patient has been in the hospital more than a dozen times; but, as a rule, two or three attacks finish a career. The writer once heard an eminent Professor of Medicine say that he had no hopes whatever of the reform of a man who had once had delirium tremens.

The two wards that were devoted to little boys (very few little girls applied for admission) were very interesting places. The good women who took care of them were as kind to the waifs as if they were their own. The rooms were ornamented with pictures, and texts of Scripture on illuminated cards; and after the doctors had made their dreaded visits, and the danger of being hurt was over, it was a right cheerful place. The little fellows who were able to be out of bed would hobble around to those less fortunate, and chatter over their toys as cheerfully as boys who were well. They were mostly gamins, uncared for by father or mother, or, at least, very poorly watched over; who had suffered accident from heedlessly jumping on or off street-cars, or playing on the track, or from similar carelessness. Occasionally, there was the victim of a carousal. One little Italian music vender, I remember, who was shot in the face and head with slugs from a revolver, in the hands of a man sitting nearly opposite him, in one of the dens of Baxter street. The motive for this terrible crime on the poor little child of some twelve years was never known. His swarthy father held him tenderly in his arms during the three or four days that he lived, responding to the wail that now and then came from his lips, in agonizing accents which rang through the ward.

The slaughter of the innocents, as it takes place in our large cities from carelessness and filth, is never more painfully seen than in the waiting-rooms of our dispensaries and the wards of our hospitals.

> "They look up with their pale and sunken faces,
> And their look is dread to see,
> For they mind you of their angels in high places.
> With eyes turned on Deity."

This article should not be concluded without the statement that very much of the cleanliness, good order, and general efficiency for which the New York Hospital was famous, was due to the fact that the visiting and inspecting committees of the board of governors appointed from their own number, whose duty it was to inspect the hospital once a week, to confer with the medical officers and superintendent, did their work thoroughly and well, although it must have been at the expense of their private affairs. The house staff often met the venerable, but active president of the board in his rounds about the wards, and were stimulated to the performance of their duty by the zeal with which he did his.

The "doctors' mob," in the winter of 1787 and '88, when the infuriated populace would have torn the hospital to the ground, because of the dissection of dead bodies, which they supposed was carried on within its walls, and when they became so

infuriated as to stone the venerated John Jay and the gallant Baron Steuben, who were vainly endeavoring to quiet them, is a part of the history of New York, and if properly treated, would require an article of itself. With this exception, the New York Hospital has always been on excellent terms with the people, and enjoyed a deservedly excellent reputation among them. Many a hard-working man has strictly enjoined his family to have him carried to it, in case any serious accident happend to him, preferring the care of its trained nurses and skilled physicians to that which his humble home could afford. May the time be not far off when it shall arise from its ruins, to again do its beneficent work.

Since the foregoing was written, the New York Hospital has been re-organized, and a new building capable of accommodating one hundred and fifty patients, has been constructed on 15th St. It was formally opened seven years after the destruction of the venerable pile on Broadway. It has a beautiful, well arranged and expensive interior, but it faces a narrow and crowded street, and is more than five stories high. Despite its elegance, it is no fit successor to the venerable buildings surrounded by beautiful grounds, the loss of which I have deplored. The real work of the old Hospital

is carried on in Chambers St., in what is called the "House of Relief." The Bloomingdale asylum has not been removed to West Farms, but continues in its old position. The only part of the new hospital that may be said to be fairly in keeping with its history, now reaching over more than one hundred and nine years, is the Library, which is presided over by one of the oldest and most esteemed officials of the institution, Dr. Vandervoort. This is one of the largest and best in the country. The Governors are entitled to the hearty thanks of the Medical Profession for maintaining and extending it in such a manner that its value can hardly be overestimated.

ANNIVERSARY ADDRESS

II.

ANNIVERSARY ADDRESS.

Delivered before the Alumni of the Medical department of the University of the City of New York March 4, 1872.

THE character of the audience before which I have the honor to stand, composed as it is of those who are members of the profession of medicine, and of others who represent that body, known in their discussions as the laity, is an admonition that it will not be the time or place in which to enter upon a strictly professional or technical line of thought in what I may have to say. It may be assumed, however, that this is an assemblage of the friends of the medical profession, and that a common field of interest may be found in some of the subjects that arise from the duties of medical men, and which are suggested by such an anniversary as the one we are now celebrating.

The recurrence of the annual meeting of the

alumni of the Medical Department of this University very naturally suggests, I think, an inquiry as to the benefits of such organizations. Why are they formed? Of what use is it that we, who have been graduated in medicine from the same college, have banded ourselves together in an association with dinners, annual addresses, and treasurer's accounts?

We can all at once see why men who, as boys, have lived in the most intimate social relations for four years, who have sat side by side on the recitation-bench for term after term, and who have finally, almost, if not quite, in tears, smoked the pipe of union, and planted the ivy of remembrance on the college walls, should unite in class and college associations to live over the days of auld lang syne: but in the three years of a man's life as a medical student, and the few months of them that are spent under the roof of a medical college, there is very little of sentiment, and also very little that one would care to live over again.

Very few of the students of a large class are well acquainted with each other. One term of such a life is often spent at a college in Michigan, another at one in Massachusetts or Virginia, and finally the graduation occurs in New York. So that very few of those who have sat together on the college-benches, and who have jostled and elbowed each other in the crowded wards of the

hospital, are even very well acquainted, much less socially intimate.

For these and other reasons that might be given, alumni associations of graduates in medicine cannot have, as their chief object, the renewal of old friendships and college memories. There is, however, as I believe, a great value in such organizations. It is a matter of regret that we have not had them for a longer time. Medical colleges have unfortunately sometimes gotten into the position of representatives without constituents. They have stood as it were alone. Their graduates have felt that their active interest in *alma mater* was gone when the diploma was obtained. Thus the colleges have lost the aid which a band of loyal alumni would always give, while the profession at large, which all medical colleges serve, have been unduly delayed in receiving the improvements in medical training which would undoubtedly be suggested by men who from years of active practice have acquired ideas that even professors would be glad to adopt.

Who is there who doubts that those honored universities, Harvard and Yale, have been largely the gainers since their alumni have taken an active interest in their affairs? To no less an extent, if the end can be properly attained, will our medical colleges be profited, and through them the

whole profession, by alumni associations; for, as I believe, and as I shall attempt to show, it is to the medical colleges that we must look for any great advance in medical education, and I was about to add, in medical science.

Prior to the organization of this association, some six years ago, so little interest had the graduates of this college taken in their *alma mater*, that, although she has an honored career of more than thirty years, and has graduated more than three thousand men, their history remained entirely unwritten, and they exerted almost no influence whatever upon the department. Many of the medical colleges in the country have been furnished with one or more professors who took their degree in the University of the City of New York. In every city, and almost in every hamlet of our land, in Canada, and even in far-off China, Syria, and Hindostan, her graduates were doing successful and honored work, and yet in the city whence they went forth there was not even an annual roll-call. To record this history was one of the objects for which this association was founded. That object will soon be accomplished, for the publishing committee are about to go to press with a catalogue which I trust will be a beginning in the work of rescuing names from oblivion which the world ought not to let die.

But, far beyond any such purpose as this matter of history is the one which I hope will be fully developed in our subsequent career as a society. We should endeavor to increase the activity and resources of our *alma mater* in the field of science and medicine. By thus doing, we shall not only benefit her, but every other medical college in the land, or drive those that are past betterment into a deserved dissolution,

We hear a great deal in our journals and societies of the elevation of the standard of medical education. The phrase has become so hackneyed that it has lost much of its force, and yet all of us will admit that there must be an advance if Medicine is to keep step at all with her sister arts and sciences.

I know of no way in which this advance may be attained except through the medical colleges. To-day, a diploma from one of them is worth all other evidence as to the fitness of its owner to practise medicine, although we are all sorry to admit that even this is not always a guarantee of acquirement. Medical colleges, fond as the profession is of reproaching them, have done more for the scientific education of medical men in our country than all other means combined.

It is claimed on high authority, however, that medical colleges cannot fulfill the task of advanc-

ing medical science, or of stimulating strictly scientific researches. It is undoubtedly true that only in a post-graduate course in university laboratories and dissecting-rooms, where there are scholarships and libraries, and all that belong to liberal endowments, may we expect original and independent scientific researches. But certainly, a medical college is better able to furnish this course than any other kind of an organization. Moreover, a very large share of all the scientific work that is done in medicine is done by the teachers and *attachés* of medical schools. Of ten papers read before our County Society during the last year, six were from professors in medical schools, and two of the remainder were from avowed clinical teachers. A reference to the catalogue of books published by one of our leading publishers shows that, with three exceptions, these books were written by professors in medical colleges.

I am not here to claim that our medical colleges have come up to that which may be justly expected of them, but such as they are, without them, our societies, journalism, and literature, could not live a day. I think we shall find that medical colleges have as high a standard and do as much for medical science as the profession demands of them. Just as soon as physicians, in such organizations as ours demand more, and show

a willingness to assist in carrying out the plans proposed, the colleges will be glad to take great steps forward. But the grumbling of those who take no interest in medical schools, attended by spasmodic and impertinent expressions of contemptuous opinions in regard to all the work of the colleges, will advance nothing.

Why has Harvard Medical School fallen off in her students to the number of one hundred and five? Because her new standard is too high, or because she has no faithful constituency in her alumni, who, having been consulted in the changes made, have promised to sustain them? Did those one hundred and five men stay away of themselves, or did their preceptors and the medical men about them allow them to do so? I am far from saying that all the changes made in Boston should be adopted in New York, but I do say that the Harvard Medical School needs the profession of New England at her back.

There is certainly need for changes in our system of medical instruction. We have outgrown our garments to such an extent that we present almost a ridiculous appearance when viewed in certain directions. Yet what man of us would copy the entire system of medical instruction as it obtains in Germany or England, and incorporate one of those into our plans.

Faulty as our system is, let us calmly see what it has done for us. The average American medical student, at the end of his course of three years, which is so largely voluntary, compares very favorably with the average German who has been engaged in medical studies for five years, in spite of the fact that the American often knows very little Latin and no Greek, while the German knows a great deal of each. Undoubtedly, the German system has fewer defects than ours, but no system will of itself make a scholar or a practitioner, any more than a bad system can prevent a man from being both.

An impartial visitor to the wards of a German hospital, and to those of New York, Boston, and Philadelphia, will tell you that the Americans exhibit quite as good surgery as their transatlantic brethren; and that which we technically call the practice of medicine will, I am sure, not suffer by the comparison.

Again, where was there a better medical corps, one which did a nation more honor, than that which managed the medical department of our army in the late civil war? And to-day will not the medical staff of our army and navy compare well with that of any nation? Where has there been better scientific work than that which has come from Woodward, Otis, Curtis, and others,

under the direction of the surgeon-generals? What organization did better medical service in the world's history than our late Sanitary Commission, managed, as to its medical details, by such men as Stillé, Elisha Harris, Van Buren and Agnew?

All of these men were graduates at American medical colleges, and few of them have supplemented the education there obtained, except from the resources of their own land.

A system which has produced such results, and men such as these, should not be wholly condemned. Its defects should be remedied, its virtues amplified, but no revolution should be made, although we know that our course of instruction must be improved. The nation and the world, as the centuries go on, are becoming more critical even as to the culture of their medical advisers. It is an undeniable fact that the diseases of our country to-day are, so to speak, of a more refined nature than those of a hundred years ago. They are those of a civilization which is nearly the same in our young land, so rapidly is knowledge disseminated, as that of peoples whose forests were cleared, and whose fields tilled and cities built, a thousand years ago. As proofs of this statement, let us consider the fact that such affections as the neuralgias, short-sightedness, affections of the brain, are greatly on the increase, especially in large

cities. Thus we are approximating the civilization of Germany, where myopia is almost the rule among the educated classes. A writer on this disease, some sixty years since, Ware, quoted by Donders, shows that, while short-sightedness was almost unknown among the privates of the English Foot-guards, it was very common in Oxford and Cambridge Universities; in one college at Oxford, thirty-two out of one hundred and-twenty-seven, or about one in four, were short-sighted.

Even in Germany, however, in the mountain villages, where the school-terms are short and the studies simple, myopes are rare; while in a class of medical graduates, pursuing a special course at Berlin in 1862, nearly one-half of the Germans wore concave glasses.

The number of publications on nervous disease, on wear and tear, the haggard looks of our overworked men in all kinds of business and in all professions, furnish the evidence of a class of affections of which our fathers knew very little. They were pioneers, forest-hewers, road-makers; we are the army of occupation in camp and garrison. Our course of medical education needs, then, in these times, more of detail and refinement to meet these enlarged requirements. Not but that we still, and shall always, need bold and skilful surgeons for amputations, resections, and the removal

of tumors, and for the emergencies of the battle-field, for all the requirements of every-day ills and accidents; but, we must have, besides them, the men who will make minute investigations in diseased tissues, who will study the shades of insanity, those who will adjust the cylindric lens to the astigmatic eye, and perhaps so learn the science of acoustics, that a sound reflector will be made for the deaf. Then again we must have experienced and large minded sanitarians, who will influence and participate in the Legislation that affects the public health.

The course of instruction that was adapted to a time when there was no microscopic anatomy, no auscultation, no ophthalmoscope, no laryngoscope, no otoscope, and no clinical lectures, is certainly not entirely competent to fnlfill the requirements of our day. Attempts have been made on all sides to adapt our schools to these requirements, but some of these adaptations have made the state of things worse. We have more lectures, with the same number of hours of instruction. The old preceptor system, under which the medical student actually spent the time in the office or by the sick-bed at the side of his teacher, has fallen into disuse, to be replaced by a summer session which students attend or not, as they please, the fact being that not more than one in four does attend it.

It is true that we now have professors of almost all the branches of medicine, but many of them have no power of participation in the examination for a degree. It does not take much judgment of human nature to decide as to how many students will attend the course of instruction of a professor who has no power to compel attendance. As a practical result, many of the graduates have never attended such lectures.

We can readily see how easily all this might be improved, not, as I have already said, by a revolution or convulsive change, but by a natural amplification of the means now employed. If attendance upon the spring and summer course were made obligatory, and if all the teachers except the assistants took part in the examination for a degree, the chief defects would be remedied. There is one part of the present system, however, for which mild measures will not do. There a radical change is necessary. Students of different degrees of proficiency should not be allowed to attend the same lectures. There should be a class system, and a graded scheme of study. This is a point that requires no argument; it is only wonderful that the present arrangement has had so long a life.

Some of the much-vaunted advantages of the present day, by which men who know nothing

of the nomenclature of the diseases of which they get perhaps a peep over the shoulders of a crowd around a sick-bed, vainly attempting to see and hear what only a dozen or two can look at or listen to, also need a radical improvement. Clinical instruction should not be addresses to a mob, but the systematized, Socratic teaching of a limited number, so that the student is obliged to take an active interest in the case before him. Much of the so-called clinical teaching is only by courtesy thus named.

If I were to speak of the improvements that have been made in our present system, I should have a long list to go over. It would be a welcome task to show how the medical colleges have advanced in the last twenty-five years. Since the foundation of this department in 1841, and mainly through that foundation, New York has become a medical metropolis, instead of being what it then was, with relation to Philadelphia, a mere provincial town. Then we had about one hundred students in one school, now we have a thousand in three flourishing colleges, with laboratory, dissecting-room, and hospital advantages which were then scarcely dreamed of even by the most enthusiastic promoter of medical education.

But we, as alumni and friends of medical schools, are chiefly anxious to know what we can

do to remedy defects. There are occasions enough for congratulation upon what has already been accomplished.

I am also attempting to show that there should be changes, not the uprooting of the good parts of our American plan, substituting those which are foreign, and which in some respects need as much change as our own. I am aware of that intensely unpatriotic aud sycophantic view which looks at all our attempts at science, that are not after the European model, as failures; that one which regards all our efforts in the way of education with contemptuous pity, about as we view colleges among the Cherokees, and Choctaws, and freedmen; but I, nevertheless, hold to the belief that it remains for this country, and for the city of New York, to develop a system of medical teaching and a race of scientific men which shall have no superiors in the world.*

As an illustration of the feelings with which some of our brethren across the sea regard our attempts to cultivate medical science, I may repeat an apocryphal story of what the great strategist of Europe thinks of our military science and art:

It is said that Von Moltke declined to read any history of the late civil war, because it was an account of the proceedings of an armed mob.

* See note at close of this Address.

It is probable that the Prussian general was never so rude as to say any thing like this, and yet many of us know, if he entertains the same views with thousands of his countrymen, that this would not have been an unnatural expression.

What we do need most, and first of all, in our medical colleges—a need which only alumni can fill by their influence and efforts—are endowments for professorships. The teachers should be free from any taint of desire of large classes, merely that their salaries may be increased. We need more opportunities for special studies and investigations in chemical and physiological laboratories, in the dissecting-rooms, and the clinical wards. We also need libraries and scholarships, in short, what money will bring—money not to be spent on the outside of the cup and the platter, the college building and the lecture-room, but for the support of men who are willing to labor for science, if science can give them their bread-and-butter.

The money that now goes to found new universities in Montana and Nevada should stay in our Eastern colleges, that now have the buildings, but sadly need the internal essentials for making them of use.

The wealthy country, which owes a debt to the medical profession, not by any means paid, is willing to assist in endowing these chairs, and in

founding these scholarships, as I have no doubt they would if a proper appeal were made to it, such a one as Chancellor Crosby has so successfully made in behalf of another department. Surely the discovery of the anæsthetic powers of sulphuric ether, an agent whose value cannot even be estimated, deserves some more fitting reward than a monument of brass in the public garden at Boston. Those who are grateful for that which has robbed the surgeon's knife of nearly all its terrors, can do no greater honor to the memory of Morton, who suggested and urged upon Warren the use of this blessed agent, than by founding chairs, which shall cause other pain-stilling, death-preventing remedies to be discovered and compounded.

Our lack of opportunity for scientific work in this land has caused us to do too much in the way of translating and editing, and comparatively too little original work.

But it is not altogether want of means that has prevented us from taking the rank which, as inheritors of the accumulated culture of the Old World, we might have claimed. The visitor to the ancient University of Leyden, founded when a nation was engaged in a struggle for existence, to which our late war was but mimic strife, who has expected palatial halls and gorgeously-furnished

lecture-rooms, must be surprised when he looks upon the humble surroundings of such men as Boerhaave, who did for our science and art what will ever make Dutchmen flush with pride.

And in Berlin and Vienna, as the student of to-day lingers with the mighty masters of those schools, he will see that the means at their command are not those of external surroundings. The most of their advantages are open to us. They are in brief, brains, and objects upon which to use them. We should cease our efforts to become merely fluent discoursers on other men's opinions; we must, by habits of close observation, begin to have opinions of our own. If men with large opportunities are too busy to use them, some of their redundant practice should go to their needier brethren, while a little work is done for the profession. Men with four or five hospital appointments, and who are candidates for more, should resign some of them, and work for science, instead of hurrying to get from one half-accomplished task to another. In our cities, and even in our hamlets, there is many a busy, and wise, and successful practitioner of medicine, who will go down to his grave with facts full of interest locked in his breast, discoveries denied revelation, not because their possessor is unwilling, but because he is too busy, to tell them.

We need in this country, where pecuniary success does so much more than it ought to secure social position, to beware, as scientific men, of the struggle for crowded consulting-rooms, and an unending round of engagements. The admiration and even the gratitude of the crowd are things of to-day, while the rewards of a devotion to science and charity are eternal.

One of our gifted countrymen,* a laborer in another and a higher calling than ours, has read us practitioners of medicine a lesson that we need, in his apt commentary on the old French proverb, *noblesse oblige*. This motto of men of rank and privilege is of itself an argument for professional work into which the idea of pecuniary reward does not enter, and it cannot be too thoroughly esteemed by us.

Even with our present system of education, if each one of us embraced his opportunity, the New York school would soon be quoted, not for the number of its graduates, but, like those of London, Paris, Berlin, and Vienna, for its scientific discoveries.

Brethren of the alumni of this college, let us do something for our school that shall redound to the glory of *alma mater*, and the honor of our land. We may, with our more than two thousand

* Rev. Edward E. Hale, *Old and New*, Sept., 1871.

living graduates, become a power in the cause of medical reform. We are more than two hundred even in this city and suburbs, although the Faculty have never aimed to make this a local college. Our organization here should be so strong, and have such a purpose, as to engage the sympathies of our brothers even in the remotest parts of the earth.

In the patient performance of the duties that pertain to such organizations, there is none of the *éclat* attending brilliant professional efforts, but there will certainly be laurels invisible to the multitude, but forever seen by those who honor earnest work for the general welfare.

May I now, leaving this subject of the work of alumni associations in the advancement of medical education, still further trespass on the patience that has heard me thus far, by a brief discussion of some of the relations of medical men to the laity? My excuse for thus abruptly following in the track of my predecessor, our distinguished President, may be found in the fact that, while the medical profession is often criticised, it has few opportunities for answering these criticisms. Hence we are justified in availing ourselves of those which are offered.

The basis upon which physicians estimate their

fees is not always as well understood as it should be. Not but that they are cheerfully paid as a rule. Yet a successful or unsuccessful result in the treatment, the propriety of which is not questioned, is often unduly taken into consideration; unduly I say, for I assume that your medical advisers are as careful and as painstaking in their unsuccessful as in their successful cases.

We are often judged by the rules that apply to mechanics, whereas it is evident that their materials are a little more reliable than ours. Cause and effect are somewhat clearer in work upon wood and marble, than in efforts to heal the flesh and purify the blood. Physicians fret and chafe a little under the strictly pecuniary view of the value of their services. They do not consider themselves as mere laborers for hire. I am sure the public at large does not, or we should not have, as one of our greatest blessings, the poor always with us, in the treatment of whose ailments the money question can never with any propriety enter.

BOSTON MEDICAL
JUN 27 1882
LIBRARY

The fee is to us, what our code of ethics styles it, an *honorarium*. For, who can estimate in dollars and cents the value of a life saved? Who can set a price to a disabled organ or limb restored to usefulness.

In spite of these theories, which all but suicides

are supposed to entertain, how often do we hear a murmur against that *rara avis*, a thousand-dollar fee? The exceptional man who gets it is usually past the middle of a life that has been wholly given up to science and humanity. How often, again, is a fee complained of, because the physician decided that there was no disease present, or because the prescription was unavailing?

The medical profession is far from wanting a change in the present system, by which the honorarium is paid for conscientious effort, no more, no less, whether the result be a cure or failure, to arrest the disease. Yet if we were paid for lungs and throats, eyes and limbs, for health and life, due under God to our efforts, according to their market value as estimated by their possessors, we should have a much greater pecuniary reward than now, even if we received nothing in those cases where the treatment was unsuccessful. But such a system would destroy our sympathetic relations to our patients, and our calling would lose all of its sacred nature.

There are several anecdotes floating about our city, relative to the subject of fees, which may or may not be true, but which, after all, illustrate the paternal relations existing between tried and trusted medical advisers, and their patients, such as obtained in the times when people did not

change their physicians as readily as they would a garment.

It is said that the late Dr. F., for so many years the chief attraction of many circles of our society, once sent in his annual bill, which was about as large as usual, for medical services rendered the family of one of his most valued friends, when, in point of fact, he had not been in the house professionally during the entire year. The bill was paid as usual, but, when the head of the family met Dr. F., he remarked: "Doctor, I got your bill the other day, but I don't remember that any of us have been sick this year." "Very likely not," answered the bluff man of science; "oh no, but I stopped several times at the area-gate, and inquired of the servants how you all were." For that year at least the good man was paid on the Chinese principle.

The late Dr. S., who was for many years one of the prominent medical men in New York, is said to have once sent in a bill for three hundred and forty-two dollars and ninety-two cents, or some similarly odd sum. This curious bill was also paid, but when the patient met his physician he inquired: "How, doctor, did you ever get that odd ninety-two cents in my bill?" "Oh," said the doctor, "that is easily explained: my grocer's bill was just for that amount, and I knew of no

one who would so cheerfully pay it as yourself, and so I made one pay the other."

There has often been in this country, and, judging from what we read, in England also, a chronic difficulty between laymen and physicians in the management of hospitals and similar public charities. In other words, the directors and the medical board do not always get on well together. This difficulty has not arisen from any kind of natural antagonism between the two kinds of people that make up these two bodies. There is practically no such antagonism.

This difficulty, jealousy the one of the other, has arisen, as it seems to me, from the separation of the two bodies, which have a great affinity when in normal proximity, but which become very repellant when separated. Distrust has been engendered by the Chinese wall that has been built up between them in the administration of public charities.

Physicians and laymen should be on the same board and with equal powers, while the special work of each body is done by means of sub-committees. The most of the matters pertaining to the management of such institutions are of such a character that doctors have quite as much interest in them as laymen.

One of the noblest charities that the world

has ever seen, the New York Hospital, which owed its origin to Dr. Samuel Bard and Dr. John Jones, has been, as many believe, virtually annihilated, certainly has lost years of its existence, because physicians had no voice, except an advisory one, in its management, and hence could only issue a protest against its destruction. After years of discussion, because the land was very valuable for business purposes, and the funds for its support were not raised, a site that should have been sacred as long as the wharves and warehouses of New York are between the Battery and Twenty-third Street, was leased and the work of the hospital stopped. Now, our only down-town hospital is a little building, formerly an engine-house, at the edge of the Park; while those not fortunate enough, when injured or sun-struck, to gain admittance to the crowded little ward, are *gently* transported by ambulance three or four miles to Bellevue.

I think the statistics, as to the situations in which casualties occur, will show that there was never more urgent need of a hospital down-town, of the high character of the one that is now suffering such an interregnum, than to-day. It is commonly believed in the profession that there never would have been an interruption in the career of the New York Hospital, had the medical force had its full share in its government. Its fame

certainly depends upon the character of this latter body, although every one cheerfully admits the high quality of the generous services of its distinguished Board of Governors.

One of the eminent men who form the Board of Governors of the Society of the New York Hospital, in an interesting centenary address, asserts that its grave has been pathetically and fancifully dug, in an article by your speaker, in *Putnam's Magazine*. To this I can only reply that its grave has not only been dug, but its remains so deeply buried beneath the storehouses of Worth and Duane Streets, and Broadway, that probably not one of its present Board of Attending Physicians and Surgeons will be present at its resurrection.

When in all hospitals, as now obtains in some, physicians and laymen meet together as equals to consult in mutual good faith, distrust will disappear and each class will find that there is no great difference between them after all; that doctors and laity are men of like faults and virtues.

Sir Henry Holland, that eminent physician whose life reaches over almost three generations, says of our army hospitals of the late civil war that he has never seen them equalled, and he has seen those of most of the nations of the world. All these hospitals were organized and managed, even to the minutest detail, not by practical business-

men, with great wisdom in finance, but by physicians.

Our profession is perhaps wholly to blame for the present system of separation between the boards. The management of hospitals has not been wrested from them by a jealous laity, but they have allowed the latter class to assume all the troublesome care and responsibility of the management of the institutions to which they are medical advisers.

Sometimes physicians seem to have assumed the position of upper servants, not to the poor inmates of the hospitals whose servants true physicians always are, but to boards of direction. It is no wonder, then, that tradition tells, according to the address at the last anniversary of the alumni of the College of Physicians and Surgeons, that the incoming governors of one of our hospitals were instructed to "keep their feet on the necks of the doctors."

Laymen are often greatly exercised over the so-called etiquette among doctors, and we are familiar with the complaint that there is too much ceremony with each other, when a patient desires to change his physician, or when he desires to call in consultation one of the believers in a dogma, an "eclectic," "hydropathist," or the like.

It is probably not as well known as it should

be, that we have in the medical profession a system of laws, called the code of ethics, to the observance of which we are just as much bound as is a good citizen to the laws of his country.

If this code be wrong, it becomes our duty to seek to amend it, but, so long as it stands the medical law of the land, we are each one of us in honor bound to abide by it. I think that any careful examination of this code will show that, on the whole, its rules of etiquette are no more burdensome than the unwritten laws of good society. It is only to be regretted that our medical society is as yet in this country so uncrystallized that we need laws to regulate the common proprieties of intercourse among gentlemen.

The occasion does not permit of a full analysis of this code, although I may beg you to give me a few moments upon some parts of it. The code certainly was framed in the interest of the patient. The rule which deprecates even the friendly visits of a physician to the patient of a brother practitioner is an example of the extent to which this protection goes. For how easy is it by a deprecating look or shrug to give a sick friend the idea that, while all that may be very well for *him*, we never employ such a mode of treatment!

Our code says that it is derogatory to the dignitv of a medical man to resort to public advertise-

ments inviting the attention of individuals affected with particular diseases, to boast of cures and remedies, to adduce certificates of skill and success, or to perform any similar acts. In short, the code says we shall not attempt to advertise skill. This law sometimes elicits surprise; and yet who would be willing to see the daily newspapers and the dead walls placarded with the notices of the skill of our eminent jurists and theologians in trying cases and in converting souls?

If our abilities as healers of the body were to be generally advertised, the difficulty sometimes complained of, of not knowing to whom to go for the treatment of serious disease, will be by no means remedied, for the practice of medicine would then be a race in which the cunning user of printer's ink would win. It is certainly wise, and in no respect derogatory to the highest character, for a man to advertise that he has a thousand bales of cotton or a cargo of tea to sell; but where is the honest man who shall presume to advertise that he is a sure healer of the ills of human flesh?

The medical profession is sometimes thought to be very unbusiness-like because it obeys that part of the code which forbids its members from holding a patent for any surgical instrument or nostrum, or from in any way keeping secret from the brethren the virtues of a remedy.

Let me suppose that a physician in San Francisco discovers a remedy for a blighting disease, and it is well established that he has alleviated or cured many in that city who are suffering from it. If a loyal man, he at once, through the medical press, informs his brethren throughout the world of what he has learned, and we in New York are soon enjoying the benefits of his knowledge, which is now the common property of the profession. Now, let us reverse the picture, and suppose that our San Francisco friend would not tell his secret except to those who visited him personally, and paid for it, must we in New York go unrelieved because we are not able to go to him? This case, though an extreme one, covers the whole ground of argument on this question. The spirit of this wise provision of our code gave us ether as an anæsthetic in New York almost as soon as Morton and Warren had used it in Boston; and chloral was quieting pain in the sick-chambers of our metropolis immediately after Liebreich had tested its virtues in Berlin.

Systematic violation of this article of our code, which places the knowledge of one within the reach of all, would soon sweep our libraries and medical press from existence, and transform a liberal profession into a number of mercenary trades-unions.

Our profession has lately been brought to blush for one of its members, who formed a company for the exclusive sale and charlatan-like advertising of a drug which is to banish cancer from among the scourges of our race. If it were really what the calm judgment of the profession, that has fairly tried it, shows it not to be, cundurango would need no company for its sale, other than the individuals and firms that now faithfully dispense the well-tried medicines of our pharmacopœia.

It would be better far that one medical discoverer should go down to his grave in the dregs of poverty, than that, by his becoming enriched from the exclusive sale of ether and chloral, thousands should be deprived of the mitigations of anæsthesia and anodynes. The duty of our profession is plain: no trade secrets—no patent rights in things medical.

The question as to whether we should consult with men who honestly believe, or seem to, that cold water is a panacea, or with those who, discarding all the results of chemistry and physiology and pathology, believe that symptoms, and symptoms alone, are worthy to be studied, and are then to be healed by mysterious drugs redolent of the dark ages, whose potency increases with their dilution, and that diseases are cured in con-

sonance with what they are pleased to call a law, that like cures like, is a delicate one to argue in the face of a New York audience. Perhaps some of my friends are ready to ask, why should they who have so simplified the treatment of disease, so that every one with a book and numerous phials of granules is a competent medical adviser, consult with the murdering old fogies who blister and leech, and give mercury and opium, and whom they are pleased to call *allopaths.*

I do not propose to discuss this question at all, but I beg to state why we in the regular profession reject the name of "allopath," which the dogmatists have attempted to fasten upon us, and to show what we really are, what are our aims, what we have achieved, as well as the unreasonableness of those who call us illiberal; and then leave you to decide where the name of physician, the only one we claim, really belongs. Our profession does not believe in any one dogma; hence we cannot be disciples of *de curatione per contraria*—nor of *de curatione per similia.* These are all fancies with which our practical and catholic school of medicine has nothing to do. They are finely-spun theories woven in the days when pathology, and chemistry, and physiology—in other words, exact objective examinations on the living and dead subject, and in the chemical laboratory

—had done nothing for the cure of disease; when men were writers not on what they had seen on the body, but of what they imagined in the dreams of their study, and when they were readers of musty tomes, instead of being in the wards by the source of all medical books, the patient.

We of this age should have no interest in these theories; we are simply physicians, as yet unaware of the fixed but mysterious laws that others claim —who now, as always, will use any appliance or any remedy that, judging by experience in their use, or from well-settled mechanical, chemical, or physiological principles, will cure disease. We reject no one from our ranks who acts in this manner. We allow the largest liberty in the employment of remedies, although we cannot believe that cold water is the only means of treatment; that no remedies are of value except they belong to the vegetable kingdom; or that the value of all drugs is increased by attenuation and dilution, and that they all act in accordance with the so-called law that like cures like. In short, we believe with one of our eminent physiologists, Dr. B. W. Richardson, that "dogmas in medicine ought henceforth to be allowed no moment of life; every step of advancement in curing disease must be a single step, proved by its own excellence, based on its own merit. It must be like a chemical experiment,

the details of which are known, and are susceptible of being tested and demonstrated by every competent practitioner."

The regular profession, the true one, is certainly to be found with us who claim the name. She is to-day the custodian of all the great hospitals of the world, from Constantinople to London, from New York to Pekin. Even in Leipsic, where Hahnemann once flourished, and whence he was to revolutionize the medical science of the world, a statue is the principal evidence that the pretender ever existed. The student of medicine, who visits the Old World for instruction, will find that not one of their great schools has swerved from the ancient but progressive faith. He will return a disappointed but a wiser man, if he expects to find a school where the dogmatists are teachers.

The literature of the practice of medicine, from Hippocrates down to our own Watson and Niemeyer, is ours, and does not contain a line of comfort for absurd theorizers about the principles upon which remedies act. The anatomical and physiological researches of Galen, Valsalva, Eustachius, Corti, with hundreds more down to Helmholtz, Richardson, Flint, Dalton, and Draper, of the nineteenth century, form one of the quarterings on an untarnished shield.

The surgical achievements of Pott and Larrey,

of Syme and Simpson, of Cooper and Dieffenbach, of the Posts, Parker, and Mott, of Stromeyer and Billroth, of Langenbeck, Erichsen, Fergusson, Bigelow, Sims, Van Buren, Pancoast, Sayre, and Gross, are the glory of the regular profession, in which the adherents of dogmas have no part. Pathology, the offspring of modern time, is one of her children, and she points with pride to such names as Rokitansky and Virchow, Stricker, Robin, Claude Bernard, and Beale.

In special researches, where, outside of her ranks, can be found the peers of Mackenzie, Arlt, and Bowman, Wilde, Tröltsch, Gruber, and Politzer, Donders, Hebra and Wilson, Emmet and Leaming, and what body but the regular profession is the guardian of the memory and fame of Albrecht von Graefe? Thus I might go on, and the recital of names would be but the enumeration of triumphs. They belong to a profession which though often stigmatized as illiberal, has always freely given to the world the results of her labors. To that catholic profession all true laborers for science are welcome. There is room enough beneath the folds of her standard for all the diversities of honest opinion. She means to be liberal and humane in her dealings with error and ignorance, while her honors are reserved for the wise and loyal.

The following statistics, which are from official sources, show

what claim New York has to be considered a University town. The number of Academic and Professional students actually in attendance during the year 1879–80, is here exhibited as follows:

Academic Students	934
Scientific " "	620
Theological " "	234
Medical " "	1780
Law " "	541
Dental " "	99
Veterinary " "	76
Pharmacy (not official)	100
Total Students	4,384

In addition to this aggregate there were 3,355 enrolled students at the Union for Science and Art founded by Peter Cooper. These figures show that New York is one of the great university centres of the world, and that its reputation as a Commercial Metropolis is nearly equalled by its renown as a city of Colleges. No city in this country can at all compare with New York in the number of its University Students.

Since this was written, two medical institutions have been founded and safely established which have largely increased the number of professional students in New York. These are the Post-graduate Medical School and the Polyclinic. More than 800 physicians from various parts of the United States, Canada, South and Central America and the West Indies attended these medical colleges during the year 1888–89.

THE COMING MEDICAL MAN.

III.

THE COMING MEDICAL MAN.

Delivered before the New York Academy of Medicine.

MR. PRESIDENT AND FELLOWS OF THE ACADEMY OF MEDICINE.

GENTLEMEN: It is said, that when the victorious German armies had fairly entered France, after their recent contests on the frontiers, each general officer was furnished with full and accurate maps of the whole country to be traversed, even to its brooks and cross-roads, so that the entire force was soon in possession of a knowledge of what was ahead sufficient to enable it to go on with that confidence, which is so often the forerunner of success. These maps were prepared years before, when the two great nations, who afterward engaged in deadly strife, were at peace, and many of the feet that had often pressed wearily upon the roads and by-ways of France, for the purpose of making the charts that were carefully copied in the war-office in Berlin, had no part in the triumphant march that finally ended in Paris. Yet,

though unseen, they were none the less among their triumphant countrymen, and mankind awards to them also the laurels of the victor.

This kind of preparation for what may be in the future should not be, and is by no means, confined to the necessities of soldier-craft and war. The same spirit of anticipating the wants of the future is common to us all, and we are constantly building castles we shall never inhabit, and making maps we shall never use. Fortunate will it be for us if the structures that we raise are ever inhabited; if the plans that we make are ever of use to coming men, even if that use be the very slight one of showing that we aimed at something better than we had.

In the hour that has been assigned me by the council of this Academy, I propose to indulge in a little map-making, which it is hoped may in some small measure show the manner of the future advance of the medical profession: or I shall venture to give a sketch of what, as it seems to one mind, are to be some of the increased functions of the medical man of the future. I do not propose, however, to discuss in any fullness the subject of the probable future increase in our exact knowledge, nor to group and classify the gaps that exist in the territory of our science and art. This would certainly be an agreeable task, for the anticipation of

a land yet to be possessed is a cheery one, but it is one that has been often well performed, and I trust will be again. But, for the purpose of the present discussion, it will be assumed that this progress will constantly be made, and our view will simply regard the results of this continued advance of the science of medicine in the position of the coming medical man.

Upon a subject so vast, and one which is dependent in its mode of presentation to so great a degree upon the habit of thought and opportunities for observation of the writer, I shall endeavor to speak without dogmatism, and certainly with no claim to entire correctness in the views presented. One mind can but outline such a subject, and even then some of the lines may be incorrectly drawn.

Although we may all have a just pride in the present position of our science and art, we are still, consciously or unconsciously, looking forward to the coming medical man, as to a being with more knowledge and wisdom than ourselves, who shall have a higher position than that of the physician of to-day. We are none of us quite satisfied with the present state of medical knowledge, or the present scope of the functions of medical men. This want of satisfaction is no evidence that we are a race of grumblers; far from it. Such a feeling is perfectly consistent with the most patient and cheerful work,

and with a decided sense of contentment in that work. I am happy to believe, however, that the annual address to be delivered before this Academy, one hundred years from to-night, will be full of hope for the future, or, if you will allow your imagination to go so far, that, a thousand years from now, we shall have a race of medical men, still not content with the position of their present, nor satisfied with the memory of a mighty past. Indeed, if we ever settle down into a state of satisfaction with ourselves, we may consider our prospect of further enlargement of position and duties as hopeless. In these days, too, when distinguished scientists "prolong their vision backward across the boundary of experimental evidence," we as hopeful students of medical science, may be allowed to prolong ours forward, and map out the pathways and roads upon which we hope either we or our successors are to march.

There are several relations, which I may, perhaps, classify under three heads, in which the coming medical man will occupy an advanced and enlarged position from the one of to-day:

I. In relation to matters pertaining to education.

By matters pertaining to education, I mean not only the education of the child, but also that of the man, or education in its largest sense. In

his relation to the present system of educating children and youth, the physician is in a position that often becomes embarrassing, and which is sometimes wrong. He stands powerless in the midst of abuses that he cannot correct, and he seems to aid and abet them. We have practically nothing to do with the education of young children. On every hand in this city (and I fear the state of things is worse in other places) we see puny children going to and from school with books tied in their straps, or in their satchels, almost numerous enough to form a small private library. Indeed, their number is quite as large as, if not greater than, that used by students in colleges in preparing their daily tasks. These books are said to contain the lessons to be made up after school-hours, hours that begin at nine and end at two or three o'clock. We hear of these children being kept after school for trifling misdemeanors, still bending over books, and in the short twilight of these winter afternoons we may see the little innocents, who are thus undergoing their gradual but certain martyrdom, hurrying home, meanwhile prattling over their day's misfortunes, without having had one full hour of complete recreation, or an ample meal since they were hurried out of bed to a hasty breakfast and off to school. We see their little forms wasting, their soft bones bending, their eye-balls lengthening and thus pro-

ducing short-sightedness from too continuous employment in the crowded school-room, and over the study-table at home, but our advice is not asked until the deplorable consequences are painfully evident. Even then the great anxiety of parent and teacher, an anxiety often yielded to by the physician, seems to be, not to get and keep the child in a physiological condition, but to enable him to go on, without any interruption of his very important study of books—the incorrect notion being held that education consists wholly in the study of printed words. We are sent for when the defective sewerage, the leak in the waste-pipe, the over-crowding and insufficient ventilation and lighting of the schoolroom, the want of physical exercise and food, the excessive employment of the brain, have done their work, and we have to deal with a febrile, short-sighted, catarrhal, and puny patient. We are expected to cure the fever, to put glasses upon the eyes, and set the poor machine at work again, without a remonstrance against the system that has produced all this misery. We have not until very lately, been asked to look after the public and private school-houses, to see how the seats are constructed, or the rooms lighted and aired, to examine into the drainage of the college-grounds, to prescribe the diet and the proportionate hours of study and exercise. Perhaps we should not all

know how to perform these duties well, were they required of us, but they will certainly be among the functions of the coming medical man.

Some of the most horrifying reading of the day is contained in the annual reports of the New York Prison Association. In them are found detailed accounts of the condition of the Tombs Prison and of the county jails throughout the State. The dampness, filth, and overcrowding of some of these places are set forth in a manner so graphic that a report of facts becomes highly sensational. If a committee were appointed to go up and down the land, visiting our colleges, public schools, academies, and seminaries for young women; and if this commission should be brave enough to tell the whole truth about insufficient drainage of grounds, imperfect ventilation, and lighting of rooms; if they were to tell how many hours were devoted to study, sleep, and exercise respectively; what was the quality of the food; how many recitations occurred when the stomach was entirely empty, or containing only stimulating but slightly nutritious liquids; if they told also how many young women were violating ordinary physiological precautions—we should have some more of the same kind of literature as that furnished by the Prison Association, except that it would deal with a much pleasanter class of subjects. If an investigation were

even made as to the quality of air in the lecture-rooms of our medical colleges, where, among other things, lectures on hygiene are delivered, I think this commission would have a somewhat startling report to make on that subject; and, as for our churches, it has long since been decided by the architects that a sufficient quantity of fresh air is not to be obtained in them.

The medical man of to-day lives in the very midst of these abuses. He attends the churches, he lectures in the colleges, where he is poisoned by carbonic-acid gas. He even goes into the schools as a medical adviser. He is permitted to vaccinate the young ladies when there is an epidemic of small-pox, and to deliver lectures upon anatomy and physiology, and here his work usually ends: but I am glad to say that it ends, not because the medical man is entirely unconscious of his true duties, but because he is not allowed to perform them. Even the educated people, and we indeed ourselves, have not learned in any but an indefinite and most uncertain manner that the true function of the medical adviser is not so much to cure as to prevent disease. Yet we are looked upon in some quarters, on account of our feeble remonstrances against the enormities of some of the educational systems, as natural foes of education, and especially of that of young women. However

that may be, the coming medical man will wage relentless war against the abuses that now obtain in our schools and colleges, and will finally overthrow them. We need only more such good work as that of Dr. Cohn, of Breslau, and Dr. O'Sullivan and Dr. Bell, of this Academy, to give us the facts as to our school-rooms, which by their poor lighting and overcrowding are producing so much short-sightedness and worse diseases, to excite a contest which will be short, quick, and decisive. In Prussia, where the need for soldiers seems to be more felt just now than any other, the government has been induced to remodel its school-houses, in order to preserve the coming generations from an amount of myopia which threatens to decimate their armies by the exemptions on account of this defect of vision. Even the models of school-houses exhibited in Paris and Vienna, at the great Expositions, and examined by Dr. Cohn, were defective, as to their lighting and seats, in quite a large proportion. How the average New York school-room, which was once a drawing-room lighted only in front and rear, or the college recitation-room, with one or two windows and an uncovered, flickering gas-burner to assist in picking out the Greek text on the short afternoons of November, would appear in such a report as that of Dr. Cohn, it is needless to show.

In Germany, where education is compulsory, and

the ordinary letters, both written and printed, are much more difficult to decipher than our Latin characters, where populations are crowded, and school-rooms often wedged in among other buildings, the disease of short-sightedness has become almost a scourge. Our rural and backwoods school-houses, our long summer vacations, when the older children are in the hay and harvest field, as well as our simpler curriculum of study, and perhaps a richer diet, have as yet allowed us to escape from their proportion of this disease. But, in our large towns especially, the causes that have been enumerated are producing graver as well as the same affections, while defective nutrition is giving rise to vast numbers of cases of insufficient development of the eyeball, and its consequent convergent squint.

Another great evil in our public schools, that has lately been pointed out by Dr. Bell, is that children who are getting well of zymotic diseases are allowed to return to school without a physician's certificate, and thus expose hundreds of well children to danger. I need not dwell longer upon the necessity for active medical interference both in the household and in the school-room, for the purpose of regulating our educational systems, especially as they affect the growing youth. It must be obvious that the coming medical man will have a wider field for work in this department of educa-

tional matters than he now assumes, or than is allotted to him.

As regards the higher or university education, when the students are of such an age that hygienic supervision is not, for many and apparent reasons, so necessary, the physician of the future, as one of the educated classes, will, I believe, have much more influence than we have obtained, and our part of the university training of the future will receive a fuller respect and support. There seems to have been quite as much interest in medical education in New York one hundred years ago, when three young men received the first degrees in medicine that were ever granted in this country, as there is to-day. Unfortunately, with the growth of our city in business importance, the desire to make it a university town, which then pervaded many of the prominent citizens, seems to have been lost sight of. An effort has been made to build up academic colleges such as flourish in small towns; and while these, well as they have done their work, and renowned as are their teachers, do not successfully compete with the other colleges of the land, the idea that New York is preëminently the place for true university training, and not for academic schools, does not seem to have been grasped but by very few. Law schools, schools of medicine and theology, have no difficulty in attracting students

to this city, but as yet the general public do not see that these should be the objects of especial aid and care on the part of our citizens. The mass of our educated people seem to have no regard whatever for our medical colleges, except so far as there is a little personal interest from the relations of sons and brothers who are connected with them as teachers or students. This is about the same interest that is felt in well-regulated boarding or day schools, to which they have some personal attachment. These colleges are unendowed, except by the good-will of the profession and the money of their founders, and the founders are usually the faculty. They have done a good work in keeping our profession abreast of the knowledge of the famously-equipped colleges of the Old World, as well as a fair amount of original investigation, without money and sometimes without the sympathy of any but their teachers and students.

The lack of endowments is the cause of many sad results. Among many others, we may note the fact that many young men soon give up all thought of contributing any thing to the general professional knowledge by original investigation, because after a short effort of this kind, without the aid of post-graduate courses, they have been obliged to fall into the ranks of those who labor primarily for bread-and-butter, and secondarily for science.

Worse still, here and there a few, with a noble but mistaken ambition, have labored without means to combine scientific laboratory-work with the busy life of a general practitioner, and when the struggle, as it usually must be, was too great for them, they have succumbed to the physical consequences of overwork, and they lie in the church-yards, "mute, inglorious" scientists, with those virtues circumscribed which might have blest their race, had not—

> "Chill penury repressed their noble rage
> And froze the genial current of the soul."

Whatever may have been the additions that the medical profession of this country have made to the common stock of knowledge, and they have been neither few nor unimportant, they would have been largely increased by facilities at all equal with those enjoyed in the Old World. We have the men with the brains, but alas! up to this time, the educated people have about decided that whatever they may do about ministers, lawyers, and teachers, doctors must educate themselves. By the aid of their fellowships, endowments, and other university establishments, the workers of England, France, and Germany, have been gathering harvests for decades from fields in which we have only put in here and there a sickle. The coming medical man will, I believe, so impress himself upon the wise and generous people about him, or perhaps make himself so

important a character in the State, that he will have the means, now debarred the men of our time, for making investigations which shall lengthen life and mitigate disease.

Although a learned profession, we have allowed jurists, theologians, and students of other sciences, to assume the entire control of our higher educational system, until it is actually believed, in many, and high places, that medical colleges are by no means a part of university systems, and that all they can expect is a kind of *quasi*-relation to them. It is quite enough, it is assumed, if the mantle of the name of a great college covers their wants. This very city is every year giving hundreds of thousands of dollars to educate boys at Schenectady, New Haven, Cambridge, and Princeton, while it is paying very little for the instruction of men in New York; that is to say, undergraduate instruction is receiving all favor and encouragement, while post-graduate learning, the hardest to get, the most important for the nation (for the other will be got in some way or other by private means) is without assistance. There never, perhaps, was a better field for a university system than New York. We could soon increase our number of say two thousand students of medicine, law, divinity, art, and pure science, to five times that number, to the manifest benefit of our country in all relations, had we the

money to pay eminent men for teaching, and to found fellowships as prizes for the few who prove worthy of special and enlarged facilities. As it is, those of our young men, who can afford it, cross the ocean for what they ought to find at home.

Our wants are simple; we do not need an educational system on the basis of that of England, with its gorgeous piles of architecture, the accumulated riches of centuries of national life, but we may be content with very simple exteriors, provided apparatus and laboratories, libraries and scholarships, are furnished us.

We have now three medical colleges, each doing its work in an earnest and successful manner, but where they leave their graduates, we need a higher training to step in, and supplement or amplify their work. These colleges should also have the entire sympathy and active coöperation of all men who wish well for their country and themselves, for the safety of every citizen, the restriction of pauperism and crime, depend very largely upon the kind of physicians they graduate. Already New York receives students from the oldest countries of the world, from China, Japan, India, and Armenia. Had we ample university facilities for them, they would come in hundreds and carry back knowledge which should do much to make the world akin. New York commands some of the ablest divines of our

time. Its law courts are perhaps only second to those of London in importance. Our press scatters its issues over the whole world, with an influence only limited by a knowledge of the English tongue. Our hospitals, dispensaries, and infirmaries, afford the opportunities for the study of almost every form of disease. Where there are now hundreds at the doors of these departments of human learning, the coming man will see thousands, if our people are wise in time. The Government of Switzerland with a wisdom that every summer exemplifies, in the material prosperity that it brings, at an outlay of money that is simply enormous, has built magnificent highways over its Alpine passes, and planted places of rest on every beautiful prospect. Even poor Norway traverses its valleys and plateaus with roads that are the envy of Americans, simply to attract travellers to its fiords and waterfalls. If we, in educational matters, were to imitate the wisdom of these countries in their material affairs, if we were to open the avenues for science in this city, we should see ways, hitherto inaccessible and unoccupied, constantly traversed, and new points of observation incessantly occupied, and from these facilities would come results as important to the world as those New York inventions—the navigation of rivers by steam, and the transmission of news by electricity.

II. In sanitary science. Before entering upon the consideration of the probable relations of the coming medical man to sanitary science and systems, I will venture to answer a question which is sometimes asked in a semi-jocose way. While its solution is too remote to be thoroughly practical, and it is never perhaps asked in great seriousness, there is in that which suggests such an inquiry, such a want of appreciation of the real functions of a physician, that a moment's attention to it may perhaps be pardoned.

The question to which I allude, roughly stated, is about the following: "Are not you doctors working against your own calling, when you are expending so much zeal in attempting to prevent people from being sick? What will you have left to do, when sanitary science is so perfected as you are endeavoring to make it?" There are several obvious answers to this question. The medical man of the future will, it is true, have his duties somewhat changed by the advancement of sanitary science, but at the same time they will be greatly amplified, so that physicians will be more numerous in the future than now. Sanitary science does much to prevent epidemics of fever, small-pox, and cholera; but our kind of civilization increases all the wants of men, and demands not simply a sound mind in a sound body, but a perfectly-working mind in a perfectly-working body.

It was a wise man who said that "he that increaseth knowledge increaseth sorrow." All the advancements that are made in the world cause us to be more exacting of our brains, our eyes, our ears, and perhaps of all our organs. For example, a Modoc Indian does not care about eye-glasses for near and fine work, because he does not do anything that requires any close use of his eyes; but educate the savage, or, going much higher up in the scale of humanity, educate the ploughman, and he will soon be critical, not only as to glasses at all, but as to their curvature. Still higher, make of him a professor, or a clergymen, or a microscopist, and he will begin to worry over a slight degree of hypermetropic astigmatism, and he will invent glasses that shall not only make him see well, but the very best possible. Take another example: contrary to old notions, physicians generally have been teaching the public for the last few years that a discharge of pus from the ear is always a serious affair. This correct teaching has not only materially lessened the cases of this dangerous affection, but has taught people to consider the causes which may produce otorrhœa, so that all pains in the ear and all sore-throats are being carefully considered, and thus the work of the physician has been actually increased.

In former times, if a man showed some little eccentricity in action, he was quietly tabooed as a

queer stick; or, if he became somewhat violent in his eccentricity, the strait-jacket and the kindred restraints of what was appropriately called a mad-house, put him entirely out of the way. But the present medical man, and the coming one still more so, will diagnosticate the especial disease of the brain—for he considers insanity as much a material disease, as jaundice—and place his patient in a *hospital* where he is to be cured and restored to society.

The modern appliances for the detection and cure of disease are simply the exponents of demands of mankind for the greatest amount of good work from good bodies, and we shall go on in these inventions and discoveries until the days of man are lengthened, and his physical capabilities are largely increased. Our good friends, the laity, may comfort themselves with the delusive hope that when vaccination has become universal, cholera and yellow fever completely banished, cancer and consumption curable, systems of ventilation and sewerage perfected, fever a myth, doctors and their bills will be alike unknown; but, at the dawn of this physical millennium, we shall still have the birth and death of man, railway, steamship, and balloon accidents, and above all the superintendence and maintenance of the sanitary reforms and systems that are to prevent disease. Besides all this, so long as men refuse to obey the laws of health

that are plainly set before them, they must receive their punishment in requiring the services of physicians.

It is to the medical profession that the general public must look for the main part of the work of what is technically called sanitary science, and that profession must be regarded as the final arbiter in all strictly sanitary questions. Yet the medical man of to-day has but a limited control over these matters, and in some places he has no control at all. We must not hastily ascribe this anomalous state of things, in which those whose mission it is to prevent and cure disease are restricted to the latter function, entirely to the influence of those not in the profession. Physicians themselves have been often forgetful of their high calling, and have neglected their plain duties. The loyalty of the great mass of the people, high and low, and especially the low, to the medical profession, is something to make us all profoundly grateful, and at the same time ever alert for the best interests of those whom we serve.

Medical men are just awaking to the great importance of sanitary science, and we cannot expect those not directly engaged in the studies of the laws of health to be farther advanced than the students. The University of Glasgow has just recognized the necessity for positive teaching on sanitary

subjects, by the appointment of professors with charge of this subject. Our own country, after supplementing the work of the medical department of the army in an admirable sanitary commission, has organized a National Health Association that gives promise of an important work. In fact, we are in the midst of a sanitary revival.

But, as to the details of the influence and control of the physician of the future in sanitary affairs, there is much to be said. It is only within a few years that this city has had, except in times of epidemic disease, what it now enjoys, a board of men who know something about the important matter of health intrusted to them. It is a popular idea that, while to be a good watch-maker a man must be brought up to the business, to become a doctor in medicine, and to have authoritative opinions about medical science, one requires no especial knowledge. Hence, there have been Boards of Health who knew nothing of the preservation of health as a science, and even now properly-constituted boards have very little power to enforce the sanitary regulations which they regard as necessary. Many intelligent, well-instructed, I had almost said well-educated people, have not yet learned that they have no more actual right to enforce decided opinions upon the subject of preventing and curing disease, than well-educated

cabin-passengers in an ocean steamer have to the avowal of authoritative ideas as to how the ship should be steered, or its engines managed. But, we have only as a profession to begin to show, by our devotion to our science and art, as a science and as an art, that we are what we claim to be, the proper guardians of the health of the people, to deserve, at least, to have our authority as much respected in all sanitary matters as is the Health Officer of the Port of New York, when his flag is seen, and his boat runs across the bows of an incoming steamship.

The insufficient influence exerted by the medical man of to-day in great sanitary questions may, I think, be illustrated by the teetotal crusade of the West, and the hydrophobia panic in New York. Whatever may be the individual views of the medical profession as to the expediency of ever using alcoholic fluids as a beverage (and I suppose we differ among ourselves on that point as much as other men), we are all agreed that the habitual use of distilled liquors, in contradistinction from light wines and beer, is highly injurious to the health and longevity of the human race. We are also agreed that the adulteration of liquors adds greatly to the dangers of intemperance. Yet, so imperfectly have we done our work of inducing restraint in the use of distilled liquors, and of attempting

to substitute less intoxicating drinks for the national stimulant, whiskey, as well as of preventing the adulteration of liquors, that war was lately waged in many of the towns and villages of the West, actual war, against the liquor-saloons, which an unhealthy moral sentiment had created. However great the evils of intemperance, a state of civil war will never overcome them, no matter with what motives undertaken.

In New York, in the summer of 1874, there occurred a panic that filled many a household with terror, because the majority of a board of city rulers enacted and enforced a law on a sanitary subject, which had the opposition of the medical profession, both officially and unofficially expressed. In order to guard our city against that fatal but very rare disease, hydrophobia, our idle young lads were educated at the public expense in theft and bloodshed, and such an unnatural dread and animosity were excited against man's most faithful friend of the brute creation—an animal whose life was perhaps as valuable as that of some of his persecutors —that a dog upon the island of Manhattan bade fair to be as great a rarity as the now extinct dodo. Our Board of Health was powerless, as it often unfortunately is, to do any thing more than to protest, while ignorance celebrated its triumph in the brutalities of the dog law. The coming medical

man, by his exact knowledge, and his improved means and increased power for disseminating and enforcing that knowledge, will exercise such a controlling influence on sanitary matters, that total-abstinence crusades and dog-wars, will be unnecessary and unknown.

The medical profession has no desire to withhold scientific information from all those whom it may benefit, and undoubtedly our facilities for the spread of such knowledge will be increased, so soon as we can be assured that it will be prized and respected. But, with our insufficient authority, we have not as yet found, in many cases, a means of influencing the public mind without at the same time leaving a suspicion that there has been an advertisement of skill in curing disease, a thing that has been always repugnant to the tastes of the scientific as well as practising physician. The coming medical man will certainly announce his opinions on special subjects more than he is now able to, but they will probably be found in the form of well-considered conclusions to be directly presented to the lay authorities whom they are designed to influence.

Yet, as I have before indicated, the little power that medical men have to enforce their sanitary opinions, sad as it is to say, is due very largely to their own supineness and want of practical judg-

ment. There are countries in the world where scientists and especially medical scientists abound, men learned in all the causes and consequences of disease, and yet, in these countries so accustomed have people become to the foulness of filthy out-houses and open sewers, that their cities and towns have become odorous enough to cause the average inhabitant of a less scientific country to regret the natural keenness of his scent. The studies of the laboratory and dead-house will produce no respect, unless their results are seen in a practical lessening of the sources of disease. We must see to it that, in becoming scientific about sanitary matters, we do not cease to be practical, or the coming medical man will have no more influence than does the one of to-day.

It has been for a long time taken for granted that Boards of Health, Commissioners of Quarantine, etc., are to be not only largely made up of men without medical education, but that the boards are to be at the control of partisans who look upon the management of sanitary boards as rewards for party services. The time is coming when, whatever we may have of civil service reform in other quarters, we shall certainly have it in the care of the health of the people. With what satisfaction would the intelligent citizens of the State greet the reform which announces that our Board of Health, and

our Commissioners of Charities and Corrections, were beyond the reach of partisan control, appointed during life and good conduct! In the future we shall see all this care of the health and charities of the city and State lifted far up above the vicissitudes of political strife.

The day is also coming when the medical responsibility for the condition of asylums for the blind, and deaf and dumb, and for that of general hospitals, will be far greater than it is now. What may be done for the comfort of those who are considered hopelessly blind, but who yet, in a few instances have some sight to be preserved and increased, certain of us have had occasion to see in watching the practice of a Fellow of this Academy, who is one of the surgeons having the care of the eyes of the inmates of our Blind Asylum. The wisdom which provides special attendance even for the almost sightless eyes of the inmates of the schools for those who are educated without the aid of vision, will finally be imitated not only in all colleges for the blind, but in those for the deaf and dumb. In the latter-named places about one-half the inmates are there from causes that occurred after birth. In very many of these cases the disease that caused the deafness still exists, and shows itself in various ways; and yet these hospitals, for hospitals they truly are, much as the

name may be disliked, usually have only physicians to attend the acute cases of general disease, while the suppurating ears and swollen throats are neglected.

Our great hospitals are usually supposed to be wholly in the care of the profession, and we are held responsible by the average public for their faults, while the credit is usually given to them for their beneficial results. Yet, as a rule, the profession is only responsible for the direction of the positively medical treatment. They have nothing to say, except in the way of advice, as to the location general management, the quality of the supplies. and so forth, upon which so much of the efficiency of hospitals depends. Almost the only hospitals in the country, for whose sanitary condition physicians are completely responsible, are those under the control of the Medical Departments of the Army and Navy. These hospitals, during our late civil war, when they were upon a scale seldom equalled in any country, were entirely under the management of medical men. There was no added financial wisdom from gentlemen learned in commercial pursuits. The record of these hospitals is certainly one of which a nation may be proud, for they have become models for the world. In them the medical profession not only exhibited its skill, but also vindicated its ability to assume the con-

trol of its own affairs. In spite of the lessons thus taught, many of our large hospitals are still controlled by Boards of Managers, none of whom are physicians. Yet it seems evident that the layman who gives or provides the money, and the physicians who oversee the medical work, should sit side by side in the committee-room, and together direct and control the great object of their labors.

Our profession, by accepting a system which excludes them from the directorships of hospitals, has lost one of its best opportunities for influencing the mind of a generous and educated laity. The day has long since passed away, even in the country whence we obtained our notions on this subject, when there is anything like the relation of patron between the director and physician of a hospital. The relation may possibly have existed in the time of fulsome dedicatory epistles from authors to noblemen, or when Dr. Johnson waited in the anteroom of Lord Chesterfield, but no one thinks of such a one now. The full recognition of the true relations will be experienced by the coming medical man when in all our great establishments for the care of the sick he sits down with his brother philanthropist to look into the affairs which they together control.

III. In the State. In discussing the relations of the medical man to the State, we are very likely to

think first of the regulation by the government of the qualifications for the practice of his profession. As matters now stand, any person who chooses may practise medicine. It is true that a law was passed by the last Legislature of our State, which prohibits any one from practising who has neither a license from a county medical society nor a diploma from a medical college. This law bears on the face of it an attempt at the protection of the public from quackery. But, when we find that there are three county medical societies and five medical colleges in this city, and that only one of these societies, and three of these colleges, would be recognized as competent authorities in medical education by such bodies as the Royal College of Physicians of England, our notions as to the value of such protection from the State must materially change. When there are no sects in medicine, and when the necessary qualifications of a physician are pretty well understood by our law-makers, it is probable that such laws may be of service, but it is hard to see how this legislation is any other than meddlesome, which will in no wise benefit those for whom it was ostensibly framed. As yet, it seems as if our ancient but ever-progressive profession must avoid entangling alliances with a State that has no proper conception of our position and claims. The evil of irregular practitioners and sects

in medicine is founded in ignorance, and we must perhaps patiently await better sentiments among those who call themselves physicians, and the laity, before we can hope for such relations with the government as will elevate our own standard and protect the people. If this law be left on the statute-book, and enforced, it is probable that every one who has the least desire to practice medicine will be furnished with a license or a diploma, and thus the legal qualifications will be rendered perfect, but the actual fitness will remain the same. The coming medical man will live in a day when all diplomas will be valuable, when there will be no sects in medicine; then, perhaps, the State and our profession will be in closer alliance. There is, however, a kind of allegiance to the State, which we all fully recognize, that of giving voluntary service, which our education enables us to proffer; and we would not like to forget that, in becoming physicians, we do not cease to be citizens who are interested in all that pertains to the public weal.

The reader of our national history, especially of its details, as contained in its old journals and monographs, must be struck with the fact that there was a time, in New York City at least, when the physician appeared somewhat more as a citizen than he does now. There was not quite so much of the class feeling which separated the med

ical man from his fellow as now. Some of the causes which have produced this state of things are unavoidable in the growth of a great city, the change in the character of medical studies, the general dislike to mix with affairs that have any tinge of mere party politics in them, and so forth; but it is greatly to be regretted that the profession has not of late developed more men with very decided social and (in the high sense) political influence. However learned and scientific we may become, and to be such a profession is undoubtedly our chief aim, we are still in this country, of all the countries of the world, citizens, responsible to the State. When so much of the legislation of the country must of necessity be turned, in these latter and in the coming days, toward sanitary affairs, the profession of medicine may well inquire whether we may not have duties in the matter of instruct ing that legislation. In no way can that be done so well as by a representative and experienced medical man, having the confidence of his peers, who shall give a turn to all the questions that affect the public health in such a manner that our legislation may reflect the best medical science of the State. We cannot believe that the coming medical man can ever be a partisan, but there are higher politics in which he will, perhaps, take much more part than the physician is now able to do.

The English profession live in a much older civilization than ours, and they are becoming very strenuous for more thorough medical representation in the cabinet and legislature. Our needs are certain to be, if they are not already, the same as those of the country from which we in such large measure spring. Is it not probable that there will be one day a bureau or department of sanitary science, where now is rapidly forming one of the best of pathological museums, and one of the largest of medical libraries?

There are quite often questions arising in medical jurisprudence, that would be better settled by medical jurors than any other. Such a one was the famous trial that lately agitated the empire of Great Britain, when an impostor laid claim to an enormous estate by claiming to be a man to whom he had very little physical resemblance. Thousands of pounds were expended, a great popular ferment was caused, a jury was kept from their ordinary pursuits in life, for an almost unparalleled period of time, in the discussion of questions of identity that ought to have been settled by experts. As suggested by the English medical authorities (Guy and Ferrier), a preliminary examination of the body of the claimant would have soon determined whether it was possibly that of Roger Tichborne. There was only a period of

twelve years between the time of the supposed death of the eccentric baronet and the appearance of the pretender, and, as he was twenty-five years old when last seen, it would certainly have been possible for a medical commission to have soon settled a question of identity.

We may congratulate ourselves that the disposition to seek the aid of medical experts is every day becoming more pronounced, and that in this respect also our functions will certainly be greatly enlarged.

In concluding this sketch of what we may hope will be some of the enlarged duties of the medical man of the future, I may perhaps be pardoned for a brief reference to what our profession has done for the State outside of the direct line of duty. I speak not of mere tyros in medicine, who have hastily shaken off the cares of one calling to assume another, or of those who bore the title of doctor as an honorary one, while their chief interests were in another direction than that of the care of the sick; but of those who, after giving years of successful work to the every-day duties of their calling, turned aside from the watching of fevers and the adjustment of fractures, and, like Cincinnatus and Putnam, left the implements of labor where they were found by the messenger who came to call them to their country's aid.

Among the signers of the Declaration that led

to our becoming an independent nation, and also among the active members of the first Continental Congress, is found the name of Benjamin Rush, one still honored and quoted wherever medical science is studied. At Princeton, in the struggle about Nassau Hall, General Hugh Mercer, who had already won honor and fame as a practitioner of medicine, fell in battle. It was a physician also, and one who was the progenitor of a line of distinguished surgeons, who led our forefathers at Bunker Hill. In the direct line of duty, in the great contest through which our country has lately passed, there were hundreds of medical men, who endured all the hardships of camp, and all the dangers of the battle-field, by the side of their brethren of the line, with no idea of the rewards that were the hope of those who served their country under no greater danger and with no more devotion.

We may hope, however, that these occasions for service to the State are passed forever, and that we shall never be called from the sick-room, the laboratory, and the hospital-ward, to any other duties to it, than the regulation and management of the sanitary work of the government. Yet we may claim that, in all relations, our profession has deserved well of the republic, and I believe we may look forward to a day when the duties of the phys-

ician to his individual patients, to the public at large, and to the State, will be performed under better facilities, and with greater appreciation and success—to a time when a higher position, as one of the educated and responsible classes, will be taken by the medical man.

HUMAN EYES.

IV.

HUMAN EYES.*

THE doctrines taught in many quarters with reference to the use, or rather the non-use of spectacles, are the same that are promulgated through the advertising columns of the daily press, and in the street placards of charlatans, who claim to preserve vision without the aid of spectacles. Venders of so-called eye-cups, wonder-working, self-constituted doctors of medicine, have tried to teach us that the use of spectacles is a delusion and a snare. Very many sensible persons are actually afraid to wear glasses when they are needed. The following paper is intended to show them their error in having such a fear.

We shall attempt to show, to those who have no time for physiological or optical studies, that such opinions are at variance with the accepted views of all those who have any claim to authority in the matter of the refraction and accommoda-

* This paper was originally written in answer to an article that appeared in "Hours at Home." In revising it for the present publication, those changes have been made which were necessary to take away any suggestion of individual controversy.

tion of the eye, on a study of which, and on that alone, the knowledge of the proper use of spectacles must depend.

It may be necessary to remind the reader, that by the refraction of the eye, we understand its power of breaking up the rays of light which enter through the cornea and pupil, and of thus causing them to unite in a focus on the retina. By the accommodation of the eye, we mean the function by which we adapt our eyes for vision at different distances; that function which enables us for example, to look for one instant at the printed page before us, and the next at the face of a friend, or upon a landscape.

The anatomical structure of the eye-ball, which must of necessity determine its refractive power, as well as the function of accommodating the eye for vision at different distances, have been the objects of earnest study for centuries. Pliny, Pythagoras, Plato, Euclid, Galen and Bacon, discoursed on vision, and each left the subject enriched by his investigations. The physiologists of the 19th century have been particularly active in this department. Their acquisitions have been so great, that it is now fully time that they should be made a part of the common stock of knowledge.

The statements which disregard all these results of scientific investigation, may do much harm.

Delicate persons, for whose failing power of adapting the muscles of the eye, spectacles have been recommended by competent authority; short-sighted persons, who "dangle lunettes at the end of a ribbon;" sexagenarians, who have been complacently using properly adapted lenses with great satisfaction, have become alarmed by the startling and revolutionary doctrines set before them, which but for their spectacles, they would have been unable to read. Even in the face of the comfort which these assistances of vision have afforded them, such persons are gravely asking, are these things so? The writer of this, lately saw an eminent clergyman, somewhat advanced in years, and who certainly needed glasses, vainly attempting in the pulpit, to read his sermon without their aid, or as an author who has written against the use of spectacles has said, sometimes endeavoring "to cause the slack vessels to come up to his assistance, and restore the original focal distance." He only succeeded however, in annoying his congregation and spoiling a good sermon, in attempting to do a thing as impracticable as the famous scientific experiment of lifting one's self by the waist-band of the trowsers.

It is stated that the man who has not yet put on glasses never need do so. This declaration is in direct opposition to the views of all the phys-

iologists and students of optics in the world who have any reputation whatever. Either they have made, and are continuing to make, grievous errors in their practical deductions from the physiology of vision, and the writer from whom I have just quoted has been the person upon whom the distinguished honor has come of overthrowing all these, by a few strokes of the pen, or absolute and absurd error has been taught by the latter, and scattered broadcast among the intelligent classes of our land. There is no middle line. If this distinguished author is right, all the modern physiologists and ophthalmologists, on both sides of the Atlantic, are wrong. If he is right, it would be better for them to desert their laboratories and consulting-rooms at once, than to go on in the propagation of such monstrous error, as that now taught by them, namely, that spectacles properly adapted are of inestimable value.

One writer, after a phillipic against the use of glasses to improve the sight, tell us that this is a spectacle age, and that there is a fashionable proneness to look through glasses of some sort; "were they $500 a pair, and only attainable by persons of wealth," he continues, "there would be more quiet eyes, and far less occupation for oculists —a profession that came into existence with eye-glasses."

An English writer, about three centuries ago, seems to have had the same task of defending the use of spectacles that has devolved upon the present writer. Their use was then in its infancy, and those who attributed their action to evil spirits were perhaps to be pardoned. The Englishman says, "Great talk there is of a glass made at Oxford, in which men might see things that were done by evil spirits. But I know the reason to be good and natural, and to be aright by geometry." Lord Bacon, also, not having a vision of the new physiology to warn him from indulging a hope that spectacles might be a boon to humanity, says, "This instrument, a plane, convex glass, is useful to old men, and to those that have weak eyes, for they may see the smallest letters sufficiently magnified." In 1299, not a great while after spectacles were invented, an author, whose works only exist in manuscript, also says, "I find myself so pressed by age, that I can neither read nor write without those glasses they call spectacles, lately invented to the great advantage of poor old men, when their sight grows weak." In a sermon of an Italian friar who died in 1311, the following passage occurs: "It is not twenty years since the art of making spectacles was found out, and is indeed one of the best and most necessary inventions of the world." On the tomb of *Salvinus Amatus*,

also an Italian, who died in 1317, is inscribed "the inventor of spectacles."

Such are the indications which history gives us of the high esteem with which spectacles were regarded in the infancy of their use. Yet 500 years later there are writers who say that they are unnecessary and harmful, and that their invention was no advance at all, but a step that took us away from the halcyon period, when "like wild and domesticated animals, birds and reptiles, man retired with the shades of evening, and opened his eyelids in the morning as the light gradually approaches." It is certainly correct to assume that if men were such animals, and made no more demands upon their eye-sight than birds and reptiles, they would need no spectacles. Inasmuch, however, as they are men, and wish to read and write, it is possible that they may require them, the new physiology to the contrary notwithstanding.

The reasons which require so much use of spectacles in this age are obvious. Great demands are made upon eyes and vision by the multifarious employments of a civilized and cultured people. Digger Indians and Hottentots do not need spectacles. They are not required to use their vision for close work and small objects. The inhabitants of civilized lands however must thus use their eyes, or not fill up the full measure of their existence.

It is true that the employments of this age cause other diseases than those prevailing in savage and barbarous times. Some of the conditions of the eye-ball, making spectacles indispensable, are thus produced. But the reflecting mind can scarcely imagine this to be any cause for the rejection of their aid. As well might the patient refuse a tonic, because he has become debilitated from excessive work and activity, or deny himself carefully chosen and well cooked food, because his civilized culture prevents him from eating like a savage. Spectacles are one of the great gifts of God, with which to counteract the effects of disease and advancing years.

The eyes which require spectacles may be divided into four classes:—

1. The far-sighted eye of old age. 2. The near-sighted eye, or the eye that is too long. 3. The far-sighted eye of youth, or the eye that is too short. 4. The weak eye, or the eye that has been injured by over work.

This classification is no artificial one. It does not depend on fashion, or the mere dogmatic assertion of medical theorists, but on anatomical structure, and physiological action, as determined by accurate investigation and experience.

Before discussing these various conditions in their order, let me state that all the eyes for which

spectacles are required cannot be placed under these heads, but, in order to avoid undue prolixity and complication of the subject, I have preferred to omit any remarks on the less important classes, or at least to defer them until the close of the article.

While we are indebted to a long line of scientific worthies for the gradual progress, which has finally enabled us to discriminate as to the kind of spectacles which should be worn in different cases, to Dr. F. C. Donders, Professor of Physiology in the University of Utrecht, belongs the honor of having arranged the whole subject, enriched by very many of his own investigations, in an harmonious whole. His great work on the Refraction and Accommodation of the Eye, was first written in the Dutch language, but it has been translated into the English and German, and is everywhere recognized as the highest authority on the subject of which it treats. The views that are here presented are mainly derived from this work.

1. The eye of old age requires spectacles. Not because the cornea—the anterior transparent coat of the eye—becomes flattened in old age, as is often said, nor for the reason given by another writer, who says, that the loss of vision depends upon a diminished activity of the secreting vessels, but because a little muscle within the eye-ball, called by anatomists, the *ciliary muscle*, loses some of its

power as old age comes on. This little muscle passes around the eye-ball, connecting the cornea and iris to the choroid coat, and to the ligament, which holds the lens in position. The vigor or tone of this muscle becomes impaired with advancing years. Its ordinary work is that of making the lens of the eye thicker than it is when the eye is in a state of rest. The rays of light coming from a near object, from the page we are now reading, for instance, have a divergent course, they are continually going away from each other; when they come from an object much further off they are parallel, or nearly so. Thus the rays from the music on the piano, do not come to the eye of the player as divergently as those from her sewing, which is held nearer than the music, and the further the object is removed the less divergent, the nearer parallel the rays become. In every act of changing our gaze from a remote object to a near one, in other words, during the act of accommodating the vision for a near object, the lens of the eye becomes thicker: it must then be relaxed, become thinner, in turning one's eyes from an object near at hand to one that is far removed. The lens also loses some of its natural elasticity with advancing age. It can no longer undergo this alternate change with the same readiness as in youth.

Thus we have two factors, both acting within, and not without the eye-ball, that impair the adjusting power of the eye. No eye-cups to lengthen the ball, no process of straining upon the eye, will ever be of any but the most harmful assistance in attempting to overcome these natural and senile changes. The small object which the man of fifty desires to see, is held further off than when he was thirty because he can then have the benefit of rays of light that are less divergent than those coming from it when it is very near him. They will then of course not require so thick a lens to unite them in a distinct image upon the retina. The little enfeebled ciliary muscle will not be required to do as much work. That work has been constantly done, except during sleep, ever since our baby eyes began to look wonderingly from the rattle to mamma's face. As we turned from the book we were reading to the landscape before us, in all the multifarious employments of life which require a different line of vision, the ciliary muscle has become alternately tense and relaxed, the lens increased and lessened in size. The vigor of the muscle is at last impaired, the faithful servant has become feeble with age. The great invention of spectacles is now made available to restore the lost equilibrium. There is not enough power for the work de-

manded. A double convex lens, just such an one in shape as the one inside the eye is placed outside of it, in front of it, in a spectacle frame. The lens within the eye is thus practically made thicker, and the book may be held at the old and proper distance. Perhaps the reader has sometimes wondered why old persons lift up or remove their spectacles when they turn from a book or newspaper to the face of some one with whom they wish to converse. By remembering what has been said above, about the rays of light being the less divergent, the further off the object from which they come, and that the lens requires to be made thicker in proportion to the nearness of the object, this will be easily understood. These views rest upon accurate and experimental investigation.

Among other absurd advice given by those who have a horror of spectacles is that which I now quote literally. "Persist in holding the book in the old form of vision," whatever that may mean, "until the slack vessels come up to the assistance, in reëstablishing the original focal distance," which will, in accordance with the new physiology, "even if under perplexing disadvantages" be finally achieved. The attempt of the economist run mad to bring his horse to live without eating, by gradually diminishing his food until he was brought down to one oat per diem,

was quite as successful as will be any attempt to rejuvenate a muscle and a lens, which have become senile from the same natural but inexorable laws that cause all the powers of man to decay.

The view that those who have not yet worn spectacles need not put them on, is sustained by a reference to the cases seen in every circle of individuals, where old people read without glasses. Here again the true explanation of a natural state of things has been quietly ignored. The old people who are to be seen working without glasses, were born with an eye-ball which is too long. The senile changes which tend to shorten the eye, are thus counterbalanced or neutralized by the congenital malformation. This is probably the explanation of such cases as those of Cicero, Humboldt, and John Quincy Adams, which were adduced by one author. Professor Donders remarks that the most useful eye is one that is somewhat short-sighted, for the reason that in advanced life glasses need not be used for reading and writing, by such persons. These subjects are apt to boast of the superiority of their eye-sight over that of their neighbors. If we place a weak, concave lens before their eye, we can soon convince them, that they can see objects at a distance better with than without its aid. The superiority of their vision, then, is limited to near objects.

The remarks that have as yet been made in this article refer chiefly to the eye of old age. I will now go on and speak of the reasons for the use of spectacles in the case of young people.

2. Short-sighted eyes, or those which are too long from before backward, require spectacles. This is a congenital condition, sometimes inherited. It is more common in Germany, probably, than in any other country. Undoubtedly, if generation after generation overwork their eyes, and under improper conditions of light and character of type, a race of near-sighted people will be at last produced. This has occurred in the cultivated classes in Germany, and it is occurring in this country.

When once existing, short-sightedness is apt to increase, if great care be not taken in preventing those who are its subjects, from too prolonged use of the eyes, with the head greatly bent over toward the work, or with an improper or insufficient illumination of the objects looked upon. Great care should therefore be taken in arranging school-desks and the like, in order that short-sighted children may not become more so. The late Horace Greeley with a practical sagacity that was characteristic, was at great pains to save his short sighted eyes by writing at a high desk.

Short-sighted persons do not usually need

glasses, for reading or writing, for the very simple reason that divergent rays of light are easily brought to a focus on a retina, which is situated further back than it should be. Very little tension is required of their muscle of accommodation in uniting those rays. But in looking at a distance, when the rays of light which strike the eye are parallel, they have trouble. Do what they will, they cannot unite such rays on a distinct image on the retina. They unite in front of it. The reader will remember that his short-sighted friends cannot read signs, they do not know their friends on the other side of the street, in short they do not see things that are somewhat removed unless they have their glasses on.

A concave lens, as we all know, disperses rays of light, producing just the opposite effect of a convex one, which collects them. Parallel rays are thus changed into those that are divergent. When a concave lens is placed before the eye, the eye-ball is in effect shortened, made to approximate one of the proper length. Any one who has normal eyes, who would like to know how indistinctly short-sighted persons see objects at a distance without concave glasses, should step into an optician's, and put himself in their position, by putting on convex glasses, which will make his eye too long. He may, after doing this, also

experience the gratification of a short-sighted person, when he puts on correcting spectacles, and looks out on a world of beauty, which he sees distinctly for the first time. This latter will be done by neutralizing the convex glasses by concave ones of the same focal distance. The experimenter has thus done what the oculist does for a short-sighted patient. The effect that is produced is purely mechanical, both in the eye naturally short-sighted and the one artificially made so.

So far from the use of proper glasses being an injury to such patients, they are a positive benefit. A neglect to wear spectacles when the circumstances require them, besides depriving a person of perfect vision, may have other serious consequences. It is doubtful if a short-sighted boy who has been unable to be a peer with his fellows, because his lack of vision has rendered him unable to fully participate in the sports of childhood can ever be properly and symmetrically developed in character. Donders and Loring have called particular attention to this result of uncorrected myopia. The short-sighted eye is also essentially a diseased eye and requires great care in its management; but spectacles rightly used assist in preserving its functions. It may be said to be diseased because it has been elongated by undue pressure from within. Dr. Edward T. Ely has

shown that a very small proportion of the newly born are myopic.

3. Eyes that are congenitally too short require glasses. This state of arrested development includes quite a large proportion of human eyes. We may rejoice, however, that we now know that in the scientific use of convex glasses, we have found a means of alleviating this condition. Until Professor Donders discovered the anatomical condition at the basis of the want of vision of this class, their fate was truly horrible. They were deemed to be unfortunates who had the eyes of old people, but to whom it was dangerous to give glasses; or still worse, they were considered as victims of incipient blindness, which could only be guarded off by the most vigorous anti-inflammatory regimen. Such patients were often confined to darkened rooms, cupped, blistered, and salivated: in short, they were in many instances, the victims of actual martyrdom. The only source of relief, that is, the use of convex glasses, was absolutely prohibited lest the weakness of sight should end in complete blindness.

The genius of Helmholtz, the inventor of the instrument by which the interior of the eye is examined, has enabled us to detect the structural abnormity which renders this class unable to see well at any distance, unless aided by glasses. By

means of the ophthalmoscope, or eye-mirror, if the cornea, lens and the vitreous humor be transparent, the back of the eye, where the optic nerve enters from the brain, may be as clearly seen, —to use a homely phrase—as the nose on a man's face. Besides this, the refractive power of the eye can be accurately determined by the same instrument. It was found by the ophthalmoscope that this class of eyes, now under consideration, were too short. Hence, both divergent and parallel rays would only come to a focus or unite behind the retina. The loss or indistinctness of sight, was explained. In convex glasses, which make an eye-ball practically longer, a remedy was found. There are no evil consequences to be feared from their use, their effect is purely mechanical, and prevents rather than causes trouble, improves the sight and assists in the development of character, just as we have seen is the case in the use of glasses for short-sightedness.

If glasses are not worn by persons who are born with eye-balls that are too short, two unpleasant results occur. One is that they cannot see distinctly; another that many such persons at last learn to deviate or squint one eye inward perhaps in order to see more distinctly with the one which they direct upon the object of vision. A large proportion of the causes of "cross-eye,"

which we see in the streets, result from a non-use of glasses, by these congenitally far-sighted persons. An accurate examination of the squinting eye will often show that distinct images are not formed upon it—in fact such persons are half blind of one eye. It is believed by some authorities that this loss of vision is due to disuse of the squinting or deviating eye. Certainly the proper use of spectacles is a great boon to such eyes.

4. Eyes whose muscles have been injured by over-work, often require glasses. Glasses are often used in this class of cases to provoke gymnastic exercise on the part of the internal muscle of the eye, or to take off part of the effort required of a debilitated muscle. They become a direct means of cure. They enable the patient to enjoy a moderate use of his eyes, at the same time that the general treatment adapted to their diseased condition is going on. This is certainly a great advance, when we consider that patients with a weakness of the eyes, that did not depend upon organic change, were formerly condemned to absolute disuse of the organ of vision for months and even years.

The writer of the present article had occasion not very long since, in the case of a member of his own family, to consider the great blessing of

spectacles to one who had over-taxed, or over-tired the eyes. Under the old regime, this patient would have been compelled to fold her arms and do nothing. If medical tortures were not added to this wearisome inactivity she would have been fortunate. Taking advantage of recent investigations, glasses were adjusted which enabled the patient in a few days to read a very considerable time at different periods, until finally, by the combination of proper general treatment, with this local and pleasant means, the lost tone of the ocular muscles was restored, while the patient had passed through but few days during which the eyes were not occupied on close work.

I will now conclude this paper by stating that some eyes come into the world of such an irregular shape that they may be too long in one meridian, and too short in another, or both meridians may be too short or *vice versa*. This state of things is called astigmatism and it also may be corrected by a glass ground from a cylinder instead of from a sphere. Astigmatism probably produces the most troublesome form of impaired sight, and its existence is often unsuspected. Its chief symptom is the inability to see vertical and horizontal lines at the same distance.

We must content ourselves with these hints which it is hoped will serve to correct the errors

of those who believe that there is harm in improving sight by glasses.

The results attained by the use of spectacles for human eyes are laurels entwined about the brow of modern physiology. No hand can tear them away. They are the insignia of centuries of struggle on the field of science.

These achievements are destined still to be amplified and repeated in the advance of human knowledge. They who advise against the use of glasses disregard the beneficent results of centuries of thought and experience in the interests of science and humanity. These so-called modern innovations will continue to alleviate human imperfections, and there will be fewer more worthy encomiums than those to the Italian on whose tomb is engraved "to the inventor of spectacles."

MAINTENANCE OF HEALTH.

V.

MAINTENANCE OF HEALTH.

Lecture delivered before the students of the Union Theological Seminary, March 1880.*

MR. PRESIDENT, GENTLEMEN OF THE FACULTY AND STUDENTS.

THERE is no particular reason why I should talk to you upon the subject of the maintenance of your personal health except that which is found in the fact that twenty years ago I was graduated in medicine, and since that time, so far as my working hours are concerned, my life has been given to the care of the sick and ailing. All that is known relative to the structure and functions of the lungs, of the heart, of the brain, and other organs of the body, you can readily acquire from the text books on physiology. As educated men with trained habits of study you can learn this as easily as any medical student, but you cannot get from any book a kind of knowl-

* Reported phonographically by Dr. Wesley M. Carpenter.

edge exactly like that obtained by a man who has been engaged for a number of years in the study and treatment of disease. No books can give this latter kind of knowledge. You will pardon me for saying, with the greatest respect for ministers, that I do not think they, as a class, fully appreciate this which I assume to be a fact. I believe that no man, however well educated, unless he is every day with the sick, either in the wards of a hospital or in the rooms of private patients, can speak with any authority in regard to disease or the maintenance of health. Only a man who is every day listening to the stories of sick people and whose thoughts are chiefly on the subject of their cure, is competent to prescribe for the relief of disease. He, only, has the experience which is absolutely essential to the proper performance of such a duty. Therefore in the beginning I remark, that you will make a mistake if you suppose that, with any knowledge you may possess or acquire with reference to the functions of the various organs in the body, you will be competent to venture upon any but the most general expressions of opinion with regard to the treatment of disease. The other day I was called to see a gentleman suffering from a certain malady, and incidentally he told me that he employed all his leisure time in a little workshop, where he turned out minia-

ture steam engines and toys of like character. That man may have learned a good deal about steam engines, even how to build one in a simple way, in the leisure moments he can spare from his duties as a down-town business man; but no matter how complete his machinery might appear in miniature, neither you nor I would be willing to cross the ocean in a steamship whose engines were to be managed by him alone. The moment that the practical functions of an engineer are given to such a man you go entirely beyond his competency for safe and skillful action.

It is not your province to prescribe for the sick except in the direst emergencies, when your trained minds and good common sense perhaps will be of more practical value than any that can be offered by ignorant people who may be under your care. It is not safe for any man to formulate opinions as to the treatment of disease, even from a somewhat exact knowledge of the anatomy and physiology of the human body. You will often hear it said that medicine is an inexact science. So it is, but this inexactness refers chiefly to our prescribing for disease, and the safest thing to be done is to obtain the assistance of the best and most extensive experience. This inexactness of our science is one of the reasons why it is so dangerous for men with limited

knowledge and still more limited experience, to venture upon opinions which may lead their fellow-men into serious consequences. I have said all this, lest it might be supposed that the object of these lectures upon the maintenance of health was to teach you to dispense with physicians or to enable you to prescribe for yourselves when disease has attacked your bodies.

When the Apostle Paul speaks of the body as the temple of the Holy Spirit, he has certainly given it a very high place, and has dignified it beyond any expression of ours. I propose to talk to you this afternoon with reference to some points pertaining to the care of that temple.

The brain is the part of the body which men of your calling think most of, perhaps, when they think of their physical organism, but it is possible that you do not realize, at least as you should, that good care of the brain, is always of necessity founded upon good care of the general system. Where shall I better begin in giving any ideas about the good care of the general system than with the proper management of the skin? There are many doctrines with regard to the treatment of the coverings of the body, but I think when they are carefully considered you will find there is no very great difference in opinion among those people who have reached the highest point in

civilization and at the present day hold the front rank among the nations. You know a Spanish proverb is that "the man of many baths is short lived." There is a distinguished German professor of diseases of the skin, who says that the English people are ruining themselves by frequent bathing. Now you and I are perfectly willing to compare, from a sanitary standpoint, the English with the Spaniards or the Germans, in fact with the people of any nation upon the face of the earth. Speaking as a medical man, and from a medical standpoint, the English nation may be regarded as the best representative of a people with sound minds in sound bodies, and perhaps their bathing habits have had something to do with their present good physical condition as a race. If in America we are following close upon them in our devotion to water and bathing, I think we are following them in exactly the right way. The man of average health should have a complete bath once every day. There are exceptions to this rule. Men who are chronic invalids, who were born with a physical inheritance that they can no more throw off than they can their moral natures, must be treated more tenderly than a daily bath implies. I know how difficult it is to manage this when a student has only one room, as is usually the case with young men in college, and

perhaps with a fire that is only very temporary and is supplied by wood which he himself brings from the yard; but I say, as a rule a man should have a daily bath. It does not take much water, and it is not for cleansing purposes entirely that a man needs a daily bath. I suppose that in the winter season, the man who washes the unexposed parts of his body thoroughly with soap and water twice a week is a tolerably clean man. But bathing is not solely for the sake of cleanliness of the skin; the grooming and friction that follow the bath are necessary to prevent a man from taking cold. When a man takes cold upon the least exposure, when he is conscious the first instant he enters a room that its temperature is not exactly right, there is something the matter with him. He is not well. The daily bath keeps the skin, with its miles of tubes filled with oily material,—there is no exaggeration in that statement,—in such a condition that its blood vessels will act in an instant to regulate the heat of the parts so that when the man goes from one temperature to another he will not feel the change for some time. Professor Hitchcock asks if there is any choice between morning and evening as to when the daily bath should be taken. I think there is. I think a man who has eight or ten hours of sleep should be bathed in the morning, especially if he sleeps in a room which is closer than that in

which he pursues his daily avocation. If but one bath daily can be taken, it should be in the morning. If the bather is a delicate man, it is preferable that he should take his bath in the morning, and the bath should not be cold, but luke-warm. If it is a very warm or hot bath, it should, as a rule be in the evening, because it is not quite safe to relax the system with warm water and then go out into the open air. If you are stalwart a cold bath may be taken in winter as well as summer. But you cannot harden yourselves by bathing, to any such extent that a delicate man, perhaps under-sized, perhaps with limited space for his lungs to expand in, who perhaps began his studies in badly ventilated rooms and burned freely of the midnight oil, can take a full cold bath with safety. He may be able to take a cold sponge bath. I think the feet should be washed twice a day under all ordinary circumstances. Now, the man who keeps his skin in this condition will find that he is started well in the way of preventing diseases of the kidneys, which as you already know are the waste pipes of the body, and also of preventing disease of the brain.

A few words concerning Turkish and Russian baths. When these are given to invalids they should be taken only under medical directions. They are extremely useful, but they will not work mira-

cles. The Turkish bath, no matter how rigorously taken, will not allow a man to live under improper hygienic conditions or to indulge in excesses all the week hoping that Saturday's bath will bring him up fresh for Monday. The Russian bath is more dangerous than the Turkish. The term danger can be applied to a system of bathing as well as to anything else. But both are to be taken only under medical advice. The advice received at the bath-rooms is not always of an unprejudiced character.

With regard to brain work and bodily exercise. Charles Dickens thought he could undo all the consequences of his excessive brain work by excessive physical exercise. I find many men, physicians and learned ministers, making, as it seems to me, the same mistake. Dickens sometimes walked from Gad's Hill into London, a distance of about twenty-five miles, after he had done excessive brain work. Now, to walk twenty-five miles is nothing for a man in good vigor who has not spent many hours just before the walk in active exercise of his brain, but for a man who has been composing such books as David Copperfield, working with all the intentness which such a work implies and worn by mental fatigue, such physical exercise is very exhausting. No man should take severe bodily exercise such as that

involved in reaching a certain point in a given length of time, or undergo great muscular exertion, when he is severely fatigued with mental labor. I do not mean when he is wearied simply by listening not always too intently, but when he is actually tired out from such mental work as grappling with commentaries and lexicons, or perhaps with the subject-matter of a sermon. After this he cannot immediately restore his vigor by rushing out and taking a horseback ride or by pulling at the oars. What such a person needs is some gentle exercise like walking at a moderate pace, and if possible with pleasant surroundings. But that exercise should be gentle, it should be that which will not cause the circulation of the blood to be very rapid. All your professors and all students know perfectly well that the feet are apt to become cold while they are engaged in studying or writing upon a profound or anxious subject. When such a change has been taking place in the body, it is not a wise plan to go out and undertake any very serious muscular exertion which involves rapid change in the circulation. I now speak from the experience of a physician, of one who has himself come from a delicate youth to a vigorous manhood. I think the best thing you can do after such prolonged exertion, if the weather is inviting, is to take

a gentle walk or a drive. If in the country you may fish or hunt, but if not situated so as to be able to take these or kindred exercises, the best thing is to lie down for a half hour in a well ventilated room and with sufficient covering to prevent you from taking cold. After such a rest you may start out for a more vigorous exercise, or you may have days of complete recreation out of doors.

The gymnasium has a great reputation among college students and a great many patients and young men in the city of New York think it a very proper place to obtain healthful exercise. I do not know whether my friends who are athletes will regard me as orthodox in what I shall say, but I do not know what a professional man who has an enormous muscle does with it. I do not think a professional man needs to do many things with muscles except to take long walks, ride on horseback, and fish and hunt a little, and I do not have that belief in gynnasiums which I think many men have. The exercise taken in a gymnasium is taken in confined air. It may do very well for men who live all day long in well ventilated offices, but for men like yourselves who in your college and seminary life spend many hours in company with others, and perhaps in poisoned air, I do not believe the gymnasium is, as a rule,

the place for you to recuperate. A small amount of gymnastic exercise may be done undoubtedly without harm if you have a special wish to cultivate a powerful biceps, but there is no great advantage in being able to wield a blacksmith's hammer a certain length of time without muscular tire, unless you are a blacksmith by occupation. We forget sometimes that the varieties of childhood's avocations and of early youth provide a man with about all the muscle he will need for his future use. There is no particular virtue in having a big muscle. It is a grand thing to be intellectually a well developed man, but there is nothing in the development of one's biceps out of all proportion to the rest of the body that is ennobling. Such an unsymmetrical development is not quite in keeping with good physical development unless it is actually necessary for the discharge of the duties of one's avocations. There is no necessity for it in this civilized land, and I do not believe that gymnastic exercise is to be specially commended. I would much prefer military drill, or riding after the hounds, or shooting with a good dog. Another objection against gymnastics is that the temptation to take dangerous exercise is very great. I have already lived sufficiently long to know several men who have fallen the victims of excessive exercise in gymnasiums. These places are

not always under proper medical directions. Certainly the director should be a man who has medical knowledge.

I understand that all members of this seminary are educated men already, and in that respect you have great advantage over many medical students, for medical students are not graduates of colleges in nearly so large proportion as are theological students of this church. You, with minds already trained to habits of study, know what to do, in order while studying, to get the most out of your mental labor within a limited number of hours. But I am consulted by such men as you, and I am obliged to find out how they live, where the faults are in their mode of living, in order to give them rational advice. Hence I may venture to say a word or two upon the subject on which you are experts. A great deal of credit has been given to midnight oil, and I have no doubt that it has been brilliant enough to make a great many men do good work by it, yet I think that most of the best mental work is done in the morning, and after a man has had his breakfast. I remember to have read that Albert Barnes wrote a great portion of his "Notes on the Gospels" before breakfast. Dr. Adams reminds me that he wrote all of that most wonderful work before breakfast, but this is an exception to the common rule. I believe that

most men should take a cup of coffee or a glass of milk, whichever they may be accustomed to, before beginning any intellectual work in the morning. Very few persons can long continue to do good work on an entirely empty stomach. A doctor in practice, different from ministers, must read and write books as he can. *You* have a choice of hours, and can have either an early breakfast or take a cup of coffee, a glass of milk, or a crust of bread. But work while you work, and when you get through do not dawdle in your library all the morning. You had better be in the woods or fields after earnest mental labor. Many complaints of ill feeling in the head result not from very hard work in the library, but from lazily reading in an impure and perhaps tobacco-laden air. Give your best hours, those just after a refreshing sleep, to the preparation of your sermons. Sermons are the things which do the congregation the most good. At all events the sermons are what we of the laity rely upon, as guides to our spiritual welfare and knowledge of the Scriptures. At other times you may make or receive pastoral calls, listen to the gossip of the old ladies, or dandle the children, all of which will come within your province. You can have all that for recreation.

A few words about food and feeding. There is an unwise dread in the world, of eating too much.

Dr. Flint is in the habit of saying that no man ever died while he was able to digest food. Try to eat well chosen, well cooked food. Much has been done in medicine in the way of refining drugs and when you and I are ill, we are no longer obliged to take the large and nauseating doses swallowed by our ancestors, but the refined extracts take the place of the gross preparation. Just so it is with reference to food. A true progress in civilization refines the food that we eat, while it will not take away any of its truly nutritive qualities. Good ministers should be well fed. In the days of Queen Elizabeth, Sir Walter Raleigh and Sir Philip Sidney sat down to much coarser viands than do the literary men of our time. We are improving in the preparation and quality of our food in a remarkable manner. Our possibilities in the way of cheap food are equal to those offered to any people.

Do not allow yourselves to be interrupted during your meals. If you are in a country parish, you will be obliged to receive calls from the farmer or the mechanic who thinks that he must see you the very instant he gets into the house. It is much better, if you must see your visitor at once, to bring him in and have him share your breakfast or dinner, or supper, than to have him wait in the ante-room, you knowing that he waits impatiently perhaps, as he regards his business as most im-

portant. Interruptions while eating are serious affairs for men whose chief employment is brain work. They interfere sorely with digestion.

In regard to the hour for retiring. This involves somewhat that which I have already said as to the best hours for study. An early hour for retiring is best for men who wish to do good work. The early hours of the night are better than the late ones for resting. At the very beginning of your ministerial lives it is well for you to learn that you must give up something, and must not expect to be profound men upon all subjects. You cannot be ministers with either a small or a large parish, and keep pace with all that pertains to the church, with all that is political, and with all the general and scientific literature of the day. It cannot be done. The doctors have found that out long ago. It is true that you have a little more command of your time than do physicians in active practice, but you must give up the opinion that you can fill all your spare time with reading, for it fatigues the brain to a greater or less degree the same as does any kind of mental labor. When you read politics read them earnestly, but do not consume your hours for recreation with reading that kind of literature. Do your general reading as a portion of your professional work, but not as rest for the brain.

I will conclude what I have to say this after-

noon upon the maintenance of bodily health, with some reference to a vexed question. I hope you will bear with me, for I am to give you simply my own belief and the result of my experience, and you must take it with what grains of salt may be necessary. Tea, coffee, tobacco, and alcohol. Tea is a stimulant. It has scarcely any nutriment. It is very valuable in resting a jaded and wearied brain. A cup or two of tea is sometimes very useful in driving off an attack of headache. But one of my own family made herself a nervous and excitable woman by the immoderate use of tea. This is all the hint I can give with reference to the use of tea. Coffee is actually nutritious. Coffee in the morning is food. It is more than a stimulant. In moderation therefore coffee may be used as an article of food by a man who performs brain work mostly. As to tobacco. I think the opinion of the medical profession and of the public is quite uniform upon the question of the use of tobacco, and we may therefore accept that view. It is pretty well settled that growing persons should not use tobacco. Of course we have not yet reached the ultimatum upon this subject, but it is safe to say that boys seventeen or eighteen years of age would be better off without than with tobacco. In regard to its use at a subsequent age, I am not going to stand here and advise

you not to do a thing which I do myself. I smoke one cigar a day. I would not smoke that one if I thought smoking was morally wrong, or that the one cigar injured my physical system. Two cigars daily is an excess for me, one I do not think is. Perhaps there are some for whom even one cigar would be an excess, and those persons should not take the single cigar. Tobacco then for growing persons I believe is unnecessary as a nerve stimulant and is probably harmful, but for persons who have reached fully developed manhood, when used in moderation it is probably not harmful, but beneficial. Tobacco chewing I will not speak of. There is a great deal of unsound and illogical argument used against the use of tobacco. The other day Dr. Edward T. Ely of this city made a critical examination of the eyesight of one hundred people who have lived in tobacco all their lives and who have smoked it excessively. They may have injured their general system, but that was not the subject under consideration in that examination; so far as could be ascertained, not one has certainly injured his eye. sight by the use of and work with tobacco. I do not believe that it is dangerous to tell Christian men like you, facts like these. Tobacco is a dangerous drug, but there is no reason in that fact for the argument that it must everywhere and on

every occasion be abandoned, and no man allowed to smoke.

As to alcohol. You will remember what the Bible says, "Wine that gladdens the heart and oil that causeth the face of man to shine," but "strong drink" is to be given only "to him who is ready to perish." The Bible in these texts and in the miracle at Cana gives the gist of the entire question. I do not believe there are any circumstances except in connection with disease which justify a man in using as a beverage rum, or gin, or brandy or whiskey, in other words strong drink. There are no conditions except those pertaining to disease in which their use is justified and then only by the aid of a medical adviser.

Now with regard to the lighter wines and beer. I do not believe that any growing person, under any circumstances, except those pertaining to disease, needs either wine or beer, but with adults the case is different. Some of you who read extensively have doubtless already read the opinions of seven or eight learned English physicians* with regard to the use of wine and beer. Among the many opinions which the people have received from the medical profession one from Dr. B. A. Richardson, is most often quoted, and because the doctor recommends total abstinence from alcohol as a beverage.

*"The Alcohol Question."

As opposed to him, however, there are several of equal authority, who do not go so far, and while they do not extend their license to the use of strong drink, permit the use of the light wines and beer during meals to adults, who are engaged in hard mental or physical labor. This is the doctrine which I accept, for while I hold that intemperance is a sin, I cannot believe that the temperate use of light wines or beer is a crime. Nay I believe that a very moderate indulgence in light wine and beer, at meals, will in the vast majority of cases contribute to the health and happiness of hard working or delicate men and women.

With your hearts filled with christian faith, and with the warnings against drunkenness, which the word of God so abundantly bestows, fully on your minds, you will have no difficulty, while you practice the christian law of liberty, in restraining any tendencies to excess in that which so easily becomes a mocker and a raging fire.

MAINTENANCE OF HEALTH.

SECOND LECTURE.

MAINTENANCE OF HEALTH.

SECOND LECTURE.*

Before the students of the Union Theological Seminary.

WE have been lately told, with how much truth I do not know, that an instrument has been invented called the diaphone, which will enable a man in the old world to examine the state of affairs in New York by means of sunlight from Asia; so that with the telephone and the diaphone, a man in Liverpool may not only hear what his friend in New York is saying, but see him while he is speaking. I can neither assert nor deny that this discovery is a real one. Since a great scientist asserted that a steamship would never be able to cross the Atlantic Ocean, because it could not carry coal enough to last during the voyage, and fulfilled his prophesy by coming upon the first steamer that crossed from Liverpool to New York, men of a scientific turn of mind hesitate before they deny the possibility of anything. I made an allusion to the diaphone simply

* Reported phonographically, by Dr. Wesley M. Carpenter.

to bring to your minds what has been accomplished during the life time of your honored President. The telephone, the telegraph, the railway, all, if I am not mistaken, have come into use since Dr. Adams became a grown man.

Dr. Adams says that cheap postage may be added to my list. That by no means is the least important among modern acquisitions. All these things show that there is no longer a "cool sequestered vale" in the way of life.

There is no longer any hamlet so obscure or retired that it cannot be reached by cheap postage and the telegraph. These things are not to be underestimated in the education of mankind. But this is a topic for consideration by your own Professors, and for your own thoughts; the effects that these discoveries have had upon physical existence and upon physical health may be properly a part of my theme. With all the good they have accomplished, they have also prevented much of the quiet of life which was once possible. These inventions make life very hard. No matter where you are settled, even if you go as missionaries to what we call foreign lands, you will be followed by the remorseless telegraph or the frequent interruptions of cheap postage. You will be obliged to work much harder than your predecessor simply because of the requirements which

have been made so numerous by modern inventions. These inventions come into play in making the headache and weariness which sometimes follow earnest, rapid, and continued intellectual exercise. The other day I heard a gentleman seriously complain that the constant use of the telephone had injured his brain and impaired his hearing. There seems to be some foundation for his conviction, but it was not the telephone alone, but the numerous things which surrounded the telephone and made life so hurried and hard to bear, that were doing the evil work.

Reflection upon this summary of the progress of our century, and the struggle and labor consequent upon them, will naturally cause you to draw the conclusion that there must be frequent pauses in such labors. You must have vacations. I am pained to see the things which I have sometimes occasion to read even in religious papers about minister's vacations. Some people actually seem to begrudge the Pastor his time for rest. Such persons are to be pitied, for it must be ignorance that causes this begrudging. It must be a misconception of the hard labor which is required of a man who is in earnest in this work of bringing men to love and imitate Jesus Christ. You need rest from your intellectual occupation as much as the body needs rest from continuous physical exertion.

Mental rest is as necessary as physical rest, and men habitually employed either as scholars or as those who are worried over the great interests of the church and the work of saving human souls, are quite as much in need of intellectual rest as those whose duties are to plead cases in the courts of law, or to manage the affairs of state. A vacation should be a vacation. It should be spent in play, manly play.

One of your professors told me last week of the regret expressed by a high official and hard worker for our government, when he visited England, that he should not have been trained in the practice of shooting, an enjoyment and recreation so popular there among gentlemen of his profession. I have already alluded to the great physical strength of the English nation, in which regard it leads all others. One of the reasons of this position is that their brain workers regularly and systematically take vacations. They hunt in their own country, or visit the moors of Scotland, or wander beside the waterfalls of Norway, or climb the passes in Switzerland. No one objects to granting a vacation to the college professor, to the school boy, or to the college student, and the day will come when no one, not even a correspondent, or any writer for our papers will object to the minister having an honest vaca-

tion according to his natural physical organization, to his necessities, his age and the amount of work he has to do. I knew a young minister who so startled a christian community because he played a game of base ball, that they all stood aghast. I felt sorry for the minister, but more sorry for the community that was so educated as to consider this young man in any manner demeaning himself because he joined the young people of the town in a manly game of base ball.

Let me now turn to the influence of the mind upon the physical condition. I do not believe that even we, who spend all our time in the study of diseases, as yet fully appreciate the influence which mind exerts over matter. We have not yet begun to realize how many people are cured because they think they are to be cured and how much pluck will do in dispelling conditions of disease. When you add to natural pluck christian faith fully experienced, you have a condition of mind that exerts a powerful influence upon disease. A noted surgeon once told me that he preferred to operate upon a Presbyterian to anybody else, and I said, how is that, Doctor? He answered, "because the future is all right with him, and he has made up his mind to whatever comes. If he dies it is well, and if he recovers it is well." You see he valued a calm

mind as a determining factor in the result of an operation. Many, if not all of you may have read Dr. Simpson's writings regarding the death of our Lord. Besides much in his book that is very interesting, it seems to me that Dr. Simpson has offered a valid explanation for all the symptoms which are detailed with such minuteness in the account of the death of our Saviour, especially the flowing out of blood and water when his side was pierced. It is possible to believe that the Lord died from rupture of the heart, actual rupture of the walls of the heart. Such a mode of death is not unknown in history as having been caused by great mental agony, at all events, whether the theory is correct or not, the influence which the mind exerts upon the circulation of blood is immense. It is hardly necessary to tell theological students that "he that is slow to anger is better than the mighty, and he that ruleth his spirit is better than he that taketh a city." What I mean in quoting the passage of Scripture is to encourage you, as a matter of physical health, in your attempts to restrain your temper and preserve your equanimity at all times. You may think of a *righteous indignation*, but beware how you indulge in it, for it is bad physically, bad for the heart. It is just as bad as going up stairs fast, a habit to which college stu-

dents are generally addicted. I once asked another distinguished surgeon in New York, why it was that he, at so advanced a period of life, was so well. He said one of the reasons was that he never ran up stairs. We do not properly appreciate, I think, the strain which is brought to bear upon the circulation by rapidly ascending one or two or three flights of stairs. Just attempt to speak a few sentences consecutively after going up stairs rapidly, and then you can estimate somewhat the effect the exertion has upon the respiratory apparatus.

There are some men who never get used to anything. They are always in a fret and fidget, and go through life in that condition. Such men are very much tried and annoyed by trivial circumstances, and avail themselves of all manner of devices to avoid interruptions. I have heard that some ministers shut themselves up in their study, and bar the door to all visitors. This may be necessary at times, but many of you, perhaps most of you, will be in places where no such opportunity will be afforded you for getting away from interruptions. I am not sure that you should always bear with interruptions, but at all events you will be obliged to endure a great amount of them, and the sooner you get accustomed to them the better for your head, the better for

your circulation, in short the better for your physical health. You must learn to take them as a part of your life. If you fret over them and bluster about them, you will just add another pound to the burdens which you will be called upon to bear until you lay them down upon the last day of your lives. The christian virtue of patience successfully cultivated will contribute materially to reaching a serene old age.

Ministers in the olden time were very apt to encase themselves in broadcloth on all occasions. In my youthful days a Presbyterian clergyman always meant a man wearing a shiny black suit of clothes. In the pulpit and in the drawing room broadcloth is exactly appropriate and befitting, but, for the week day work of a country parish all that should be discarded. A cheap suit, yet of grave and dignified color, can now be obtained that will serve you much better than broadcloth, and in which you will feel free to take such exercise as will be of value to you. Fortunately we have ceased to follow the French in our clothing and are imitating the English; hence comes the sensible costume worn by most people when they are not engaged in absolute professional duty. A kind of undress uniform of tweed cloth, will be found very useful and becoming. Such clothing will contribute to the desire for healthful

exercise, by not showing every trace of use. Then in the summer, instead of sweltering in broadcloth in the pulpit, alpaca may be worn. Attention to such details as these, insignificant as they may seem, actually contribute to the maintenance of health.

Some people in America have adopted the French breakfast, and take only coffee and rolls in the morning. Most young men and men in middle life need, beside coffee and rolls, beefsteak or chop, potatoes, etc. In other words, I think the American breakfast is the typical breakfast for hard working men, and I hope that it will finally be adopted in our climate for people who get up early and work for their living. I find that when I spend my summers abroad, I get on very well with the fashionable light breakfast, because I do not work, but when I come home and resume labor, beginning regularly at nine A. M. I find that I need a real breakfast. Most of my associates say the same thing. So I think that upon the whole you may adopt the American custom of morning meal with a reasonable degree of assurance that it best meets the wants of a man who works hard either mentally or physically. I think, however, that the American hour for dinner as it obtains in country towns, is not a physiological one. As working men, sup-

posing your habit is to spend the morning hours in study and the afternoon in visiting, you will do better with luncheon at noon, taken without haste if possible, and while you dine as most people do in New York and other large cities, when the work of the day is done. I am assuming of course that you are not going to burn the midnight oil, but that the night is to be spent with your families and in the discharge of the lighter duties of your life. Your preparation for the Sabbath, and for the lecture which may accompany the prayer meeting should, I think, be made in hours illuminated by the sun.

The management of the voice is an important matter with clergymen, and yet I fear that theoretical advice in this regard is of little avail. Some men are so constituted that they manage their voices with great facility, while others have so much impetuosity in their nature that unless they are extremely careful they are sure to become exhausted by the immoderate use of the vocal organs. The proper management of the voice is a very great art. If you acquire that art you will save yourselves from disease affecting the back part of the pharynx, follicular pharyngitis as it is called in medical language, or ministers' sore throat in popular parlance.

I do not know but the best advice I can give

you is to remember and keep the voice under the same control under which a wise man keeps his other muscular powers, for after all the larynx is an instrument controlled by voluntary muscles. You can play upon it with all the facility with which men learn to use a flute.

The advertisements in the newspapers tell you a great deal about catarrh. There is no doubt that some gentlemen here believe that catarrh invariably leads to consumption and very many worse things, for so we are often taught.

If all that has been written and published concerning this affection were true very many more would be subjects of consumption than really are, because doubtless eighty-one-hundredths of all the people in our Northern climates suffer more or less from catarrh. The so-called *catarrh* is simply an increased secretion from mucous membrane. If you preach vigorously for an hour you will have a subacute attack of catarrh, and catarrh sometimes, though rarely, becomes a serious disease. It is however one of the torments of life which prevents us from being perfectly well; a torment which has perhaps been given to us by inheritance, but sometimes is acquired by our own improper habits of life, and want of good sound general health.

Thorough frictions of the entire surface of the body after bathing are the fundamental

conditions of the prevention of frequent attacks of what is called catarrh or cold in the head.

No address to students on hygienic matters would be complete without some remarks upon the care of the eye-sight. Three kinds of eyes need specially concern you. There is the short-sighted eye, of which there are several examples before me, that is, an eye which cannot see distant objects distinctly without artificial aid. That aid consists of concave glasses. The gift of concave glasses to man was one of very great value.

If Gustavus Adolphus had had concave glasses I think he would not only have won the battle of Lutzen, but also saved his own life, but, as he did not have them he was unable to distinguish his own colors, and became entangled among the Imperalists and was killed. Many a boy has not attained to his full development of character simply because he has not worn glasses. Such a boy goes out to play ball; he cannot see either the ball or the boy who throws it, and he is handicapped at once. All his views of life are very different from those which are obtained by people who have eyes with the proper focus. The eye balls in short-sighted eyes are too long from before backward, and in order that this anomaly may be corrected, concave glasses are put in front of them.

If short-sightedness be not corrected in youth

something is always lost, and perhaps enough to absolutely impair usefulness and limit a career, and yet it is sometimes very difficult to get short-sighted people to obtain glasses. The probable reason is that they do not compare their visual power with others, but only with their own actual eyesight. A man born with a short-sighted eye often does not know that he does not see so well as he should, until the fact is revealed to him by putting on a pair of glasses. One of the principal objections urged against wearing spectacles or eye-glasses by short-sighted persons, is that the visual power of the wearer is not so good immediately after taking them off. This is true, but it is because the eyes have been strained when the correcting glasses were not worn. The power of seeing more distinctly has been gained by the use of great muscular force. It is better to use glasses and save this expenditure, even if for a moment or two after removing them the power of seeing is not so good.

This inability to see the sky and the stars, the hills, the mountains and the green fields, as other people see them, to recognize their friends, as other people recognize them, to see a ship upon the far out ocean, all these things must exert an influence upon the man's character. This has all been well said by special writers, such as Don-

ders and Loring.* But it should be reiterated until this subject is properly understood.

Hence I say correct your short-sightedness for distance. It is not necessary that short-sighted persons should use glasses for reading if the short-sightedness is only moderate in degree. If however it is great, so as to require a glass from four to six inches focal distance, you had better use a pair of glasses for reading also. The physiology of short-sightedness you will find in all text books upon physiology, and I will not enter upon its consideration.

There is another kind of eye which you should know about and that is the eye of youth which require, the glasses of old age. This is what is technically called the hypermetropic eye. Anatomically it is exactly the opposite to short-sighted eyes, that is, the eyeball is shorter than normal from before backwards. An old person needs convex glasses, because the eyeball becomes too short, from inability to lengthen it, as is required for seeing near and fine objects. The young eyes of which I am now speaking, are absolutely too short, and no muscular force can lengthen them sufficiently. It was a very great discovery that told us about these cases. It was made known by Donders, of Utrecht, Holland, but Professor Dewey,

* Transactions N. Y. State Medical Society—1879.

of Rochester, first discovered that glasses would correct this condition. Unfortunately, he published his paper in Silliman's Journal of Chemistry, a journal read by chemists but rarely by doctors, so we lost the benefit of his discovery that this condition of things existed in young children, namely, that they had practically the eye of old age, and, having that condition, that it could be corrected by the use of convex glasses. Prof. Dewey published his paper in 1841, and Prof. Donders announced the same discovery in 1851.

The other kind of eye of which I wish to speak, is the overworked eye, the tired eye, what is called the asthenopic eye. It is well to remember that after all eyes are only eyes.

There are certain things that cannot be done without danger of injuring the eyes. Among them is studying before breakfast, by the aid of dim light, especially if Greek, German, or Hebrew characters be those employed.

Again, it is a bad habit to work for a number of hours uninterruptedly. The use of a bad light should be avoided. A gas light with or without an Argand burner is a poor light. The light furnished by a lamp in which some preparation of petroleum is burned, is much steadier and better than gaslight. The table should be so placed that the light will fall upon the work

from the left side, so that it will not be interrupted by the arm if the man is right-handed. Illumination from above is not good; reading by twilight is bad for the eyes because the illumination is insufficient, and that means straining of the ciliary muscle in order to get exact vision. Strain continued upon any muscle and not repaired by rest, is always dangerous and brings in its train a great many evil results. Then you must do the best you can about type. Whenever you can, choose good type, and make this one of the things that shall influence you in purchasing books to be used regularly. With regard to position, no man who is short-sighted should stoop while reading, but should build up his desk so that the book reaches the height at which the letters can be seen without bending the head and body. A desk at which a man may stand is very useful for short-sighted persons. Horace Greeley was a wise man in a great many ways, and I was always much interested in the manner he used to write in the Tribune office. Without the advice of Doctors, but by the aid of some of that divine fire which burned within him, he found out how a short-sighted person should read. His desk was so high that it brought his paper very near to his eyes, and placed him in a position in which he was not obliged to bend in order to see clearly.

The bent position is very unfavorable to free circulation in the eyeball and brings dangers with it. I do not know but you will reach the conclusion soon that it is a dangerous thing to live, if all these precautions are so important. You may have heard of the country gentleman who when he heard that most people die in their beds, immediately said that he was going to give up the use of his bed altogether. But what I mean by these precautions is that by their observance, you will be able to avoid some dangers. *All* you cannot, for there come times in a man's career when he must expose himself to danger and fatigue that may ruin him for life, but it is his duty and no other course is possible for him.

But unnecessarily making one's self uncomfortable and unnecessary sacrifices, are to be despised. I remember a colonel who distinguished himself in camp by doing unnecessary things, under the impression that it was enduring hardship like a good soldier. For example, he enjoyed sitting out in the rain and submitted himself to other needless exposure, imagining that it was soldier-like to be uncomfortable. You should take every precaution possible to preserve your health without becoming morbidly self conscious.

If your eyes are merely tired and not diseased or of improper shape, they will soon recover them-

selves by rest. You will always be able to determine whether or not there is any serious affection of the optic nerve or retina by an examination to determine two points—First, whether you can read the finest type—Second, whether you can make out the letters corresponding to the heading of the New York Herald newspaper at twenty feet. Persons who habitually suffer from fatigue in using the eyes, although they may be able to see distant and near objects well, may still require glasses. They may be suffering from a concealed shortening of the eye ball, or want of focal power. Yet since the discoveries of Donders there have been some exaggerated views as to the value of glasses in such cases. Glasses will not give any man or woman the power to abuse their eyes. You have as yet nothing to do with the eyesight of old age, but the years are rolling on and you will soon reach that time. Remember when that time comes that glasses will be of great service to you. You need not look upon them as an instrument that will weaken or destroy your eyesight, but rather as one of the greatest boons given to mankind. Some of the most absurd arguments have been made in the present day about using glasses, arguments such as that the untutored savage never has any need of glasses, and that hence we need none. No doubt the untutored savage does not need glasses, neither does

the savage need Greek, but if he should read and follow the light and the labor of civilization and christian enlightenment, he would require them.

An anecdote is related of Rufus Choate in this wise. Mr. Choate, after he was forty years of age, was pleading a case before one of the great Massachusetts judges, and on referring to his notes he was seen holding the paper further and further off in his endeavor to decipher his manuscript, until at last the judge annoyed him prodigiously by saying, "Mr. Choate, I would advise you to get one of two things, either a pair of tongs or a pair of spectacles."

On account of the limited time at your disposal and mine for these lectures, much of what I have had to say, has been of necessity given in an abrupt and fragmentary manner. I hope, however, that I have suggested something that will serve as a guide to the care of your health. As a parting word I would say, attempt to fix in your mind rather the principles than the rules for the care of your bodies. The rules will be deduced as the occasion requires, if the fundamental principles be correct.

THE RELATIONS OF THE MEDICAL PROFESSION TO THE STATE.

VII.

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THE country in which we live is still a new one. Many of our forests are primitive and much of our soil is uncultivated. Even in our oldest States we may see regions upon which man, by his residence and labor, seems hardly to have made a sensible effect. We have scarcely any of the garden-like cultivation of England, we have no wood-parks like Ardennes and Fontainebleau, no gray towers on our river banks, and few of the broad and hard highways over which Moltke's armies marched to Sedan and Paris. In our vast country there is a constantly recurring impression of newness, and, in a certain sense, of roughness. I am not unmindful of what we have achieved in the way of invention, manufacture, commerce, and culture. I merely wish to recall to your minds a fact that we are all perhaps inclined to forget, namely, that we are still

* The Address of the President of the Medical Society of the State of New York, in 1879.

a new people in a new land. We cannot inherit the fullness of cultivation of the older peoples in our intellectual work any more than in the cultivation of our soil. Our relations as individuals or as guilds and professions, to each other and to the government, must of necessity be different from those which obtain among older nations with their centuries of history and of tradition. In Europe there has been time for many things to arrange themselves into a refined system. The profession of medicine in a country like England, or France, or Germany is sensibly influenced by these conditions of age and fixity, and is in certain established relations to the State, which make unnecessary many of the discussions into which we are constantly drifting. The ordinary aud extraordinary necessities of our government, have left little time for such minor matters as the determination of the relations to it of a class which the State has practically declared to have no formal connection with the governing powers. The process of arrangement is, however, now going on. For the next hundred years the people of the United States will devote much time, not only to the refinement of their material condition, to their highways and hedges, their fields and lawns; but also to the relations of the various guilds into which the people are divided, to the State to which all give

allegiance. May I then beg your attention to a consideration in outline of the relations of the medical profession to the State? I have said, deliberately, that we must be engaged for the next hundred years in establishing and perfecting them, for I have no idea that in our generation we shall do much more than begin a work which can only be completed in many decades of time. No dream of a homogeneous, vast, organized and catholic body, untormented by schism or disorder, in settled relations to the civic authorities, has passed over my mind. I do not anticipate that the legislation of this or of any subsequent session of our ancient and honorable body will create a medical Utopia, but I hope that each one of its meetings will accomplish something toward the establishment of the medical profession in such proper relations to the State as shall redound to our advantage and honor, as well as to that of the commonwealth.

I am not one of these who believe that we must model all our affairs after those of the Old World, that what is right for England, Germany and France must of necessity be right for the United States; but I hold that there must be many things in which we shall improve upon the ways of the older nations, and that, from the very nature of things, there must be many ways in which our modes differ from theirs.

I will consider the relations of the medical profession to the State under several heads.

I.—*As Witnesses to Aid in the Detection of Crime, or the Breaking up of Nuisances.*

It is probable that the singular contradictions of some of our medical experts have excited the wonder of laymen and a sense of shame in medical men. The laity have sometimes asked if there are really no fixed rules for the determination of the existence of metallic poisons in the human body; if there is no evidence of insanity that may be clearly shown to a jury; if there is no standard as to what is a perfect cure of a fracture; and if it be not possible for the physicians of New York to agree as to whether the noise from an elevated railway is an injury to the nervous system. We know, and all intelligent laymen know, that there must always be different shades of opinion upon the same subject, in a science so unsettled and progressive as our own; but nobody yet knows why it is that experts can always be found who honestly believe that no antimony ever was in a certain stomach, when it has been already discovered by supposed reliable authority, or why one man is pronounced to be raving mad by Professor A., and competent to take charge of vast

estates by Professor B. Neither does any man know why Dr. X. believes that all broken limbs ought to heal without shortening, while a professional brother, of equal position, positively states that no legs ever unite without some lessening in length. Neither do any of us probably understand why a large number of physicians are induced to say, that "perverted mental and moral action, cerebral exhaustion, insomnia, hysteria, chorea, mania, paralysis, meningitis, and decay of nutrition," will be largely promoted by life along an elevated railway, while other authorities state that "medical literature," according to their belief, "does not afford a single instance of any of these diseases being caused by noises such as are produced by the cars on an elevated railway.

The system in our law that allows able and zealous lawyers to coach and pay their own experts until they have made honest partisans of them, is certainly vicious. The State should summon, the State should pay experts, and they should act as associate judges, to aid the real judges in getting the truth before the jury. The plaintiff and defendant should undoubtedly have the right of putting their case before the medical experts, and exercise a choice in selecting them; but the medical man should receive his honorarium from the State, and never be put in the position, as an

expert, of being a witness for one side. Then the physician, surgeon, or chemist would go upon the stand, so far as it is possible for human legislation to attain such an end, without fear and without the idea of favor. Napoleon asked Du Bois to treat the Empress of France in labor, as if she were a peasant woman in a hospital, instead of a sovereign in a palace. The medical man should be placed in a position where he may be able to treat a medico-legal case as he would a dead body under his scalpel.

The subject of the adequate payment of medical experts comes, of course under this head. As matters now stand, physicians may be obliged to make long journeys, and give, for a mere pittance valuable opinions, the fruit of years of toilsome observation. It is the opinion of many, which is shared by your speaker, that the whole subject of payment of those who work for the government should be carefully looked over, and that such an examination will show that a great and powerful State ought to pay its servants so well, that the best men may be claimed and secured for its service. Certainly experts should not be taken away from their ordinary duties without a compensation that will, at least to some considerable extent, recompense them. This society has already taken action upon the subject of pay-

ment for expert testimony, by appointing a committee to ask the Legislature to consider this subject.

II.—*As Defendants in Suits for Malpractice.*

It is a matter of mortification that there should be any necessity for such a relation of the profession of medicine to the State as this. But physicians are unfortunately not exempt from the frailties and faults of humanity, and they must expect to answer at the bar of justice for any crimes they may commit. In what I have to say, there is no claim for any immunity from punishment for neglect of duty or culpable ignorance on the part of a medical practitioner; but I shall simply attempt to show how, under our present system of inquiry, medical men are at the mercy of ignorant jurors and unscrupulous lawyers. It is often the case, that after medical men have given their time without fee or reward, they are called to account on a charge of malpractice that has no other foundation than that the patient did not recover in the manner in which he or his friends thought he ought to have done. I frankly admit, however, in the outset, that we ourselves are in a measure to blame for the tone of expression about the work of physicians, which is somewhat prevalent among the people.

It has often pained many of us, I am sure, to hear a medical practitioner boast, even in the presence of laymen, of cures that he has made, when another man, his peer, had blundered. This idea of considering the result as largely due to personal and extraordinary gifts, is the basis of the notion among the laity that the attending physician is to blame if an eye be lost, a fractured limb be shortened, or if a patient die from disease. "If Dr. —— had not done so and so," or "if he had done so and so," in the common phrase, the patient would not have died; or, as I have often heard it much more strongly put, "I have always thought that Dr. —— killed that person." This is no fancy sketch. It is as flippantly and commonly asserted in ordinary social circles, that physicians often kill patients by neglect or stupidity, as that plumbers put in defective material and leave holes in waste-pipes. In a famous play of Molière's, one of his characters constantly jeers at the faculty in such phrase as this: "All the excellence of their art consists in pompous nonsense and idle babbling, which give words for reasons and promises for performance." —*toute l'excellence de leur art consiste en un pompeux galimatias, en un spécieux babil qui vous donne des mots pour des raisons et des promesses pour des effets.* No criticisms are more uproar-

iously received from a stage, than such as these, even in France where our calling has always been held in high esteem. Molière well expresses the tendency of society, and in our own time some of its most cutting sarcasms are directed upon the ignorance and want of skill of medical men. The speaker knows of a social discussion of the merits of a celebrated oculist,' which was ended by the serious assertion of a man not at all unfriendly to the subject of remark, in the following way: "Well, he has put out a great lot of eyes." To lightly accuse a man of being a liar—or a thief is still considered a disgrace in any society in our land; but a doctor is imputed with malpractice in as free and easy a manner as the most trifling peccadillo is charged upon a servant. But we, as a profession, should first clear ourselves from any complicity in this kind of detraction, before we turn upon those who lightly bandy charges against medical men. If each of us would ever guard his brother's honor as his own, and promptly avow a disbelief in the charge of malpractice which is so frequently brought to him by a patient who is about to change his physician, the flippant tone often observed in society in regard to the services of medical men would soon be changed to one of respect. Skill of hand, years of experience in

the observation of medical cases, are sometimes temptations to lead men to suppose that they can turn away the hand of disease and death when others have failed; but a little sober thought of our own impotence when the inevitable time has come, will soon lead us to an aversion to any special claims for healing power. Let us feel the sad truth, that there is a destiny that shapes the issues of life and death, rough hew them as we may, and no pressure of need for daily bread, no desire for success and fame—above all, no wish to triumph over another physician, will ever cause us to put ourselves in the attitude of tradesmen praising our wares, or of skilful mechanics promising to repair or build. Our position should be rather that of experienced, careful, and cool-headed mariners, well provided with compass, chart and lead, who hope by the blessing of God to bring the good ship into port, but who do not claim to control the fog and the storm, which, in spite of the most careful navigation, are sometimes the destruction of a gallant ship and crew.

There is need for a remedy for some of the worst features of these suits for malpractice. One of the states of our country, which is always in the van in any progressive political or social movement, has already passed a law which does away

with the system of coroners' juries as it now obtains in New York. By this new law of Massachusetts, the office of coroner is abolished. In his stead is a medical examiner, and not until his investigation as to the causes of death is ended is there any calling upon the civil power which, then appears, if necessary, in the form of the district attorney and a justice. In our State the coroner may not be even a physician, and he may be a very ignorant man, while the coroner's jury is usually obtained in the easiest way possible. When we remember that serious medical questions are very often involved in the decisions of such a coroner and such a jury—questions affecting the reputation and freedom, perhaps even the life of a physician—we do not wonder that one State has at last done away with the bad system to which New York still clings. Let me give one instance from many that could be cited of the workings of a coroner's jury in our State. A physician in New York city was recently summoned as a witness in the case of a man who had died from acute meningitis resulting from an inflammation of the middle part of the ear. The relatives of the deceased had avowedly set the investigation on foot, because they believed that the physician who was called as a witness, had caused the death of the man by a surgical operation which he had performed

upon the drum membrane. The friends and the jury were of a low type of unlettered day-laborers. The coroner had never received a scrap of medical education, and very little of any other. The theory of the investigators was that the instrument used to open the abscess in the ear, had entered the brain and caused a fatal bleeding. It was shown that the man walked away from the place where the operation was performed much relieved of severe pain, and that he returned two days after, expressing himself as much benefited. Three days after this he died, not having seen the surgeon after his second visit. The jury examined and cross-examined the physician who had performed the operation as to his skill and character, and several witnesses of the same intelligence with the jury testified very freely as to their opinion of the cause of death. The animus of the jury was so marked that the coroner was obliged to resort to some urgent advice to prevent them from bringing in a verdict which would have compelled the surgeon to appear before a grand jury. Although there was not one shadow of evidence of malpractice, but rather of proper and kindly treatment in a hospital, where as usual all the services of the attending surgeons are absolutely without fee, the jury finally brought in the following remarkable verdict: "We the jury

come to the conclusion that —— came to his death by a rupture of the blood-vessel or small brain, or with some instrument used by doctors unknown to the jury." Medical men, suspected or accused of negligence or want of skill, should be protected from the wrong of an examination of their case by those who have none of the knowledge necessary for the conduct of such an inquiry. The profession has long since asked for protection from another fault in our system, which allows a certain class of lawyers to take up cases of alleged malpractice on speculation, as it is called. Both in this country and in England physicians are quite often put to great expense and loss of time, in defending themselves from frivolous charges, which usually fall to the ground even when brought before a jury of men utterly unacquainted with the science of medicine. The law can probably give us but little relief from these attacks, for the full right of appeal to a court for redress should never be unduly restricted. But the law can see that, if tried we must be, it shall be by "careful judgment of our peers"—a right that should never be denied to ene of Anglo-Saxon blood.

More than this, we can come to such a correction of sentiment in our own profession, that it will be impossible to find medical instigators

of unjust suits. Most of these frivolous cases, unfortunately for our fair fame, depend upon the willingness of some medical men to lightly assert that a case has been improperly treated, and that in their skilful hands the result would have been different. One of our remedies for unjust attacks upon the faithfulness and skill of medical men must be found in such an elevated tone of professional sentiment as will prevent us from imitating the vilest of birds, that are said to foul their own nests.

III.—*As Educators of the Physicians of the Future*

Although, from the very early history of this country, the community has taken an active interest in education, and even in special education—that of ministers, lawyers, and teachers, scarcely anything has been done for the instruction of medical students except by the individual effort of men who elected themselves to be professors in the medical colleges which they founded. In the State of New York, at an early date, there was an attempt at a medical college which should be a department of King's, now Columbia College. In this the European idea of responsibility of the faculty to a *Senatus Academicus* was a feature; but this state of things did not continue,

and to-day not one of the leading medical colleges of the State is anything more than a first-class educational establishment, owned and practically controlled in all its details of financial management and appointment of professors, by a body usually of seven men. They are at the same time proprietors and teachers, just as much as "John Jones, A. M." is the proprietor of and professor in "the famous and large boarding-school situated on the banks of the Hudson, in full view of the Catskill Mountain House and the haunts of Rip Van Winkle." As a matter of course, the announcements and circulars of these colleges betray their private character, and offer the most flattering inducements to their patrons, while their buildings are surmounted by flagstaffs from which float their emblazoned banners. The contrast between the announcements of medical colleges in this country and the catalogues of the Universities of Vienna, Berlin, and Strasburg, with their sober, unpretentious detail of the names of teachers and the facilities open to the aspirant for medical knowledge, is not at all creditable to our sense of propriety and good taste. All that the State has to do with these colleges is to prescribe that students in them shall study three years, that they shall be twenty-one years of age when they graduate, at which time they

shall also be possessed of a good moral character. From the beginning to the end of the course of study, the men who teach in our medical schools are absolutely masters of the situation, and the ultimate judges as to the qualifications of those whom they send forth. The State virtually says, and the community still more positively: While we have an interest in the quality of our lawyers, and we see to it that the various religious bodies look after the character of their ministers, and we educate teachers at the public cost, we leave the whole business of making medical men to the private institutions where they are instructed. It is true that in some of these colleges there is a titular connection with so-called universities, but he who makes the acquaintance of the managing boards of these institutions soon finds that they have an actual contempt for the idea that it is any part of the duty of a board of councillors or regents to look after the characters or acquirements of the men whose diplomas they are signing. They are not at all unwilling, however, to publish the list of medical students in long columns, and upon the credit of it take to themselves the name of university. But to these directors medical education is entirely a private affair. So far from encouraging a close union between the departments really united to the

governing board of the college or university, they have been known in some cases to actually tax the medical department for the honor of being connected to such a stepmother. It is greatly to the credit of the medical colleges of this State that they have maintained medical teaching at a high standard, in spite of such a system and such an indifference and hostility as have been delineated. Whatever may be said to the contrary, any exact examination will show that the medical teachers of the State have always been foremost in the efforts to extend sound knowledge. Actual count will show that their books furnish the most by far of those published on medicine, and that their papers greatly outnumber those presented at the meetings of medical societies by their fellow-members of the profession. Apt as is the medical press to decry medical professors, it may be safely asserted, that the temptations of their irresponsible position have not overcome them, but they are among the chief promoters of scientific culture. Something better than a desire to advertise themselves and to secure a pecuniary reward, has usually animated the men who have founded and maintained our colleges. Admitting all this, there are so many evils in the present system, as it obtains in all but one of the medical colleges of this State, that a change is

imperatively demanded. We need an examination for admission, a graded and fuller course, and a more rigorous final examination. The only problem to be solved is, how shall we secure these ends? I think, if we turn our eyes again to the State of Massachusetts, we shall find there the only certain means of reforming our medical colleges. But I hold that the State cannot undertake the work.

In a country where there are sects, and dangerous sects in medicine, where men who are ignorant of anatomy and physiology are rated as physicians, the work of an examining board appointed by political authority, that owes allegiance to the people—to whom all so-called doctors, whether sons of seventh sons, bone-setters, patent medicine makers, or graduates of colleges and hospitals, are alike—would be a farce. Whatever may be proper for England and Germany, the United States are not yet ready for an alliance of medicine with the State. Neither do I believe that this society or any other society can successfully undertake the supervision of the medical colleges.* The older members of this society can tell us of the failures of the system of censors, and we know how the last law in regard to examinations by county societies has succeeded simply in legalizing every kind of a nominal physician. But observe what has been

* As will be seen by those who read a subsequent paper in this volume I have changed my opinions upon this point.

done by the President of Harvard University. With great ability and far-sightedness he has brought its medical school into close and responsible relations to his Board of Trustees as a part of his scheme of raising a college to the dignity of a university. He has taken it out from its independent position and made it, like academic, law, scientific, dental, and theological departments, a part of a whole. That once done, professors once independent of the favor of students, the existence of the school no longer dependent upon numbers, all needed reform became possible. Harvard has led where we must sooner or later follow. The University of Pennsylvania has also taken a step, although not a very long one, in the same direction, and the medical college at Syracuse as well as the medical department of Union University adopt the Harvard plan. The sentence against the voluntary and irresponsible system has been pronounced by the higher sense of the medical profession. There is some delay in carrying it into effect, but of the final result there can be no doubt.

This intimate connection of medical colleges with boards of trustees is only to be secured by a recognition of the true status of medical departments of universities and by endowment. The State, as such, however much we may ask of its

individual members, should not be expected to assist, even much less to endow, medical colleges. Neither special education nor special charity should be the function of a free, as contradistinguished from a paternal government. We have not passed through one hundred years of independent life to at last be bound in the swaddling-clothes of infancy. Besides, if there were no other good reason against governmental endowment, it would not be safe for our catholic profession to seek and secure an alliance with the State until the average legislator knows the difference between the man who is a physician and the man who calls himself one. The profession itself should secure these endowments. We should begin to use our powers with wealthy and influential laymen, and secure for the cause of sound medical education its share of public regard. It is our own fault that even intelligent men know nothing of the subject, and consequently have no interest in it. A prominent man in one of our cities, himself one of the governing board of a college with a medical department attached, whose diplomas he was in the habit of signing, once told a teacher in that department that he supposed medical students graduated after one year's study; and another member of a governing board of a university in this country, once said that he had yet to learn that medical education formed any

part of university training. If educated laymen do not know that a real university should have a medical school as a part of it, and that they have a vital interest in the quality of doctors sent out to practise among them and their families, we must teach them all this. Then they will endow our schools, and give them the facilities, and cause them to make the advances demanded by our time. Here is the kernel of this whole matter of reform in medical education. Anatomical, chemical and physiological chairs, and laboratories in colleges, and clinics in hospitals, should be properly although not extravagantly endowed, so that medical schools may be maintained even without excessively large classes. The present necessary laxity in admissions, and in final examination, fairly overwhelms the land with physicians. Many of them are only so by title. What was adequate in requirement for 1779 is not sufficient for a hundred years later. Our good medical colleges have all resorted to makeshifts in reform, but all the new demands are voluntary and not obligatory, so that if a man chooses he may graduate in our State with large acquirements; but if he does not so choose, or if he is not able to do so, he may get a diploma with very moderate attainments. I am not one of those, however, who believe that a proper system will of itself turn out good medical men, or that any

amount of education will compensate for want of brains. A man may be graduated from a college here and study abroad, and yet be utterly incompetent to practice medicine; while a college education and foreign travel are of inestimable value to nearly all who are fortunate enough to get them and wise enough to appreciate their advantages. When John Hunter, who could barely read and write at twenty years of age, heard that he was reproached by a rival with being ignorant of the dead languages, he replied: "I would endeavor to teach him on the dead body, that which he never knew in any language, living or dead."

Our colleges must be made better then, by being considered as one of the objects of philanthropic aid, as well as art galleries, observatories, schools of science and of theology. I doubt if one hundred thousand dollars has ever been contributed in this State toward the cause of medical education. But how shall this overtaxed and heavily burdened community find the means for this new call upon its benevolence? By sparing from its useless expenditures that which is here so much needed.

In the little churchyard at Stoke-Pogis, marked only by his name, lie the remains of the immortal man who wrote—

"Can storied urn or animated bust
Back to its mansion call the fleeting breath;
Can honor's voice provoke the silent dust,
Or flatt'ry soothe the dull, cold ear of death?"

In spite of these words, which should have an influence wherever our tongue is known, our beautiful cemeteries, where may ever grow the rose, the violet, and the forget-me-not, continue to be disfigured by costly sarcophagi and monuments and to be associated with funereal pomp. The money thus used could well be given where it might aid to lengthen life or mitigate disease.

The State has yet much to do in the matter of legalizing the dissection of unclaimed dead bodies. This is a difficult matter to manage. The chief trouble lies in the natural repugnance of the human race to the mutilation of the body after the spirit has left it. We bury our dead with a tenderness and care that show how we reverence the temple in which the soul was enshrined. The humblest and the poorest share this sentiment with the noblest and most affluent. Yet, without the dissection of dead bodies, without the careful rehearsal of surgical operations, anatomical knowledge and skill in surgical work—knowledge and skill necessary to save life, are impossible. The suggestions of some wild sentimentalists in our own profession, and of tender-hearted

journalists, that we shall get our knowledge and skill from models is simply puerile. Who would knowingly trust his life or limbs to a surgeon who had never traced out the nerves, muscles, and blood-vessels on the dead body, but who had only studied anatomy on wax models? The public was deeply stirred last winter by the desecration of the graves of honored public citizens in a distant State. Indignation waxed hot because some of the underlings of a medical college had robbed the abode of the dead. None of us have aught to say in extenuation of the misdemeanor of those who violated the sanctities of the grave. Yet we may urge the State of Ohio, and all other States, to facilitate the necessary study of anatomy and surgery among students and practitioners by allowing medical colleges to freely use all the unclaimed dead bodies, of which there are, unfortunately, many on this sad earth. Let us, as a profession, never for a moment permit the notion to become popular, that we can attempt to teach or to practise without a knowledge of the human frame derived from actual study of its structure in the dissecting-room and on the post-mortem table.

IV.—*As Managers of Institutions for the Care of the Sick and Injured.*

There is a widely diffused belief among business men and lawyers, that physicians and clergymen have very little of the ordinary tact necessary for the financial care of large interests. It is undoubtedly true that men thoroughly devoted to the high matters of the care of morals and health cannot at the same time give much attention to strictly business affairs. But in any economical plans involved in the care of the souls and bodies of their two charges, the two professions show an astuteness, and manage their affairs with a success, that may safely invite comparison. A devotion to religion or science is not at all incompatible with correct business ideas as to the erection and maintenance of a church or hospital.

Some of the great minds of the world have been famous for the ability with which they carried out the details of their calling. Samuel Smiles says that it was because the Duke of Wellington was a first-rate business man, that he never lost a battle. People are beginning to get over the notion, if they ever entertained it seriously, that true genius despises the wisdom of

this world. A man is none the less a cool surgeon, a wise physician, because he attends to his own financial affairs and those of his hospital with care. There is really nothing in the idea that a physician may not be as good a manager of economical and financial interests as a lawyer or a banker. Not because he is a good physician, but because to be a good physician he must first be a capable man. The history of an average business career in this country is not so flattering that the class which represent it can afford to claim an exclusive knowledge of how to manage hospitals and asylums. The record of the management of the army hospitals during the civil war, by physicians and surgeons of the army of the country, is a complete answer to those who would put away medical men from the care of their own. Distrust of the business and executive capacity of medical men, mingled with a notion that they are contentious, are the real reasons for the almost universal exclusion of medical men from the governing boards of hospitals and dispensaries. Yet this distrust is not founded on facts. Physicians may have been unfit managers of affairs when they were men of the cloister and the library, when they spent their time in reading the theories and fancies of other men, or when they devoted weary nights to the crucible and

the discovery of the elixir of life. But we have changed all this. The long gown of the study and the gold-headed cane of the consulting-room have been put aside for the dress and equipment of an active life. Medical learning now depends upon close study of the human frame itself, and not of ponderous folios—upon practical experiments in the laboratories and exact observation in the sick-room by the aid of all kinds of physical instruments, and not upon the development of fancy-woven theories that had no basis except in the disordered minds of their inventors. The well educated and well trained physician of to-day may manage a hospital with a facility quite equal to that of a man learned in dry goods, politics, or the stock board. It is evident that the genius of our time has not only changed the character of the medical profession; but also enlarged its sphere to a remarkable degree. We are being educated up to the responsibilities which the demands of the age have thrust upon us. Neither the community nor physicians have yet come to a full appreciation of these facts. Hence, the old condition of things obtains. Hospitals are built without medical or sanitary advice, by gentlemen who have acquired their notions of hygiene by years of study of day-books, ledgers, and real estate investments, interspersed with a

grand tour of Europe, during which they have visited the badly planned hospitals of Paris ; and they are officered by philanthropists who think the only safe way for those who value sound financial management, as well as peace and quietness, is to keep the doctors out of boards of direction. Some of the hospitals erected by laymen, in the full light of what was shown by the hospitals built by the profession during the late war, are very far from being models of economical and healthy structure. The cost of taking care of patients in some of the grand buildings of England and America is equal to that of board at our first-class hotels, with the services of a nurse and a consulting and attending physician included in the bill. Put physicians in fair proportion on the boards of erection and management of hospitals, and we would soon change all this, and inaugurate in civil hospitals the system that has given to the medical officers of the United States Army a wide and enduring fame.

V.—*As Protectors of the Community from Quackery.*

In the discussion of this part of our theme, there is at the outset a difficulty in definition. There is no difficulty with us who are of the

profession, but in the minds of those who are not in our calling. An average man, even a college-bred man, is very apt to consider medicine as an experimental art, with not much, if any, science about it; for operative surgery he may have some respect; but medicine is so largely a matter of guess-work, that to many such men the opinion of a person who has no exact knowledge of the human frame is as valuable as that of the most learned and experienced practitioner. When such a man is seriously ill he waits eagerly for his physician, and professes great estimation of his aid. When merely ailing, however, he does not hesitate to prescribe for himself, or to accept the prescriptions of any person whom he may chance upon, and who is willing to tender him advice. He will also visit Saratoga or Richfield, and enter upon a course of treatment by means of the waters there, without dreaming that it might be well to take the advice of a physician before resorting to such active medicines as are contained in Congress or sulphur springs. I think it is Mark Twain who tells the story of a sea-captain who had a chest of medicines, with a book, and various remedies numbered according to directions in the book. On the occasion of the illness of one of his sailors, the captain found, on consulting his manual, that No. 14 was the med-

icine required. No. 14 happened to be out, but on reflection he concluded that a combination that would make those numbers would do as well. He accordingly prescribed 10 and 4, and was very much surprised that a burial at sea was the result of his scientific experiment. Very few people venture to give opinions in regard to purely mechanical employments, unless they are trained to them; but the whole community, educated and ignorant alike, are quite willing to prescribe for disease and to explain physiological phenomena. At not very long intervals our newspapers give us highly colored sketches of the woman who has been unable to leave her bed for years, who cannot use her hands naturally, and yet does wonderful things with them; who sees with her eyes closed better than those of us who have ours open, who lives without eating and who is altogether a supernatural being. Sympathizing friends gather around the poor hysterical and epileptic sufferer, the victim of disease of the nerves and of excessive sympathy, and as they go away proclaim the modern miracle. The press and the clergy vie with each other in their sensational accounts, and in some instances they are aided and abetted in this work by members of our own profession. If such cases as these come to be regarded as real exceptions to the laws governing

disease and the functions of the body, we may as well put the dial marking medical progress back to the dark ages, and assimilate our views of God's government of the world to those of Cotton Mather and his fellow witch-executioners. These things show how far we are from a rational view of the science of medicine, and the cognate subjects. They also show how much remains for us to do in creating and maintaining a healthy public sentiment. A connivance with wonder-mongers, and miracle-workers greatly delays the day when our science and art shall receive the full respect of the laity. I have no time to adequately discuss the subject as to whether there is or is not a science of medicine. That there is, we know; that there is a science both in the administration of drugs, and still more perhaps in refraining from giving them, we are all sure; but how are we to expect a community that for centuries has had thrust upon it, without protection from the State, races of bone-setters aud clairvoyants, and, still worse, of men and women without even a rudimentary knowledge of the structure and functions of the human body—a community whose ears have been deafened by the din of the sects as they have vaunted their systems of cure—how can we expect them to define a charlatan or quack, when they still believe that a knowledge of the prac-

tice of medicine is a divine gift, that may, like the poetical genius, be developed in the brain of an illiterate plowman, or be the heritage of a seventh son of a seventh son?

While we may not ask the State to endow medical schools, we may certainly expect that it will protect its citizens from well-defined quackery. It certainly cannot discriminate in regard to modes of treatment, when there must always be such honest difference of opinion. The State cannot catalogue the drugs that may be used, or name the doses; but it is the bounden duty of a Government that cares for the welfare of its inhabitants, to see to it that no one is allowed to prescribe for diseases who has not furnished evidence of a satisfactory knowledge of anatomy, physiology, and chemistry. It should also interfere to prevent the sale of so-called patent medicines, and of adulterated medicines and food. A State that will not do this should, in all consistency, allow mad dogs to run in the streets, lunatics to go at large, and gunpowder to be stored in every house, and leave its railroad crossings without guards or signals. There would be no abridgement of the rights of the citizen in such a protection. If a man does not know enough to guard himself from the advice of those who prescribe for a machine of which they do not know the mechanism, the

State should interfere to protect him, just as it provides the commonest means for public safety, by means of the police and the army.

What is wanted is a board of examiners, made up of the best men from the colleges and the profession, who shall determine, not the orthodoxy of a candidate as to the doses of drugs or the uses of cold water and vegetable medicines, but as to whether he has been well grounded in the structure and functions of the human body, the remedies for poisons, the rules for action in emergencies, and the principles of diagnosis, a knowledge of which will at least, protect his patients from scandalous malpractice. If, however, civil service reform has not reached a point that assures us that the board can be appointed solely on the ground of professional fitness, and without the taint of partisan politics upon it, we are better off as we are now, with no guards whatever except those that we set up among our own members.

VI.—*As Sanitary Advisers to the Commonwealth.*

This is perhaps the most comprehensive and important of any of our relations to the State. It is the one now receiving general attention, and there is a prospect of its proper adjustment. There are, however, still many obstacles on the part of the powers that be, in the way of yielding to

physicians as a class, even in matters purely sanitary. We here meet the same difficulties that we have already discussed under other heads.

Physicians are still very largely regarded as fit only for the necessary but narrow walk of their calling—in prescribing for disease that has already broken out, and for taking charge of accidents that have already occurred. Preventive medicine, which you and I are most anxious about, is not yet fully appreciated by our lawmakers. A physician is often considered as a kind of fire-extinguisher, to be sent for in case of a conflagration, but as rather a useless member of the body politic when there is no actual crisis. We are not singular in being thus unappreciated. Lawyers are the most valuable and most occupied in the prevention of litigation, soldiers are chiefly useful to avert war; and yet advocates and soldiers are very often regarded as of no use except in the court-room and on the battle-field. To think in this way is to wholly misunderstand the work of the professions. There is a kind of exultation in the remark that a physician has not made a professional visit to the household during the year. So far as immunity from actual disease goes, this delight is as proper as it is natural, but many a man and woman who smile at the idea of the need of medical advice, are walking surely

towards the edge of a precipice from which sound counsel might keep them.

The physician should have the same prerogative in the State as in the family, and no man can be properly said to be a conscientious physician who does not, if allowed, have a general, vigilant, but not impertinent oversight of the hygienic arrangements of the household of which he is the sanitary inspector and adviser. There should be a board of health in every county and in every town, and this board should have no man upon it who has not a medical, scientific or legal education. Not a school-house, not a jail, not a hospital, not a sewer, should be built unless competent sanitary advice, with power to enforce it, be given. There are many other things of which physicians should have the oversight, which are now entirely neglected. As instances of these may be mentioned the supervision of the hygienic condition of prisons, public charities, private and public insane asylums. A supervision that is connected with the ordinary management of these places is not sufficient, however careful and conscientious may be the officers. Experience has shown that routine habits may be acquired, which only vigilant governmental supervision will prevent.

The attention of the medical profession has been lately called, both in Europe and our own

country, to the great proportion of people who have no proper idea of the difference of colors. Examination has shown that this proportion exists among railway and steamship officials. When we cross the ocean and sail up the English channel with its thousand of craft, as we are in our cabin unconscious of danger, the man on the lookout may not be able to tell a red light from a green one, or we may have been journeying on the railway to this capital behind an engineer who is equally incompetent for his important duty. We should follow the example of Sweden, and demand such a searching investigation as will put in other positions men whose visual defects now render them useless and dangerous in places where colored signals are used. In the future no steamship or railway should be allowed to employ a lookout man, switchman, or an engineer who cannot satisfactorily submit to the tests for the perception of colors.

Here is room for reform. Here is work for the closing years of the nineteenth century. What a change in public sentiment is to be made to bring about a proper state of things! And yet how necessary! In one of the most beautiful hill regions of this country, or of the world —in a spot where the sunrise and sunset are such as must shine upon the Delectable Moun-

tains—a place where the mists that roll away before the sunlight disclose green forest-covered mountain-tops that are the glory of the land—in a spot where the water leaps clear as crystal in cascade and waterfall, or meanders along the valley in the placid brook, man had so long neglected the necessary hygienic arrangements that the foulest and deadliest materials at one time contaminated the water and the air, and with this brought disease and death. The hotels were closed, their visitors scattered—some of them dying, however, before the source of evil was detected. Nor is this a solitary instance; it is only a specimen of what is constantly occurring. Epidemic upon epidemic has visited communities, notably in the South, fever has constantly broken out in beautiful valleys, children have become the victims of spinal distortion, sight has been impaired and lost by the thousand of cases, and all for the want of scientific and medical care.

What may be done in preventive medicine is perhaps nowhere better shown than in the exemption of our city of New York from cholera and yellow fever. A wise system of quarantine, rigorously carried out by an intelligent and incorruptible physician with great executive ability, while it has not restricted the freedom of commerce, has averted epidemics from a large population.

Some time since, three representative physicians called upon the mayor of a large city to ask him to appoint a doctor upon a board having charge of the public schools. Among the score or more of lawyers, politicians, and business men, who occupied the chairs, there was not one medical man. Several political reasons were given for declining this modest request, but the chief one, of a general character, was that physicians could hardly be found who could give the time from their occupations to this preventive work. Assuming that this was an honest reason, it shows a marvellous ignorance of the functions of medical men, and a supreme want of appreciation of the fact that should be evident to thinking people, that the physicians of our time have as one of their chiefest functions that care of the community which shall prevent deformity, disease, and death.

The recent epidemics of yellow fever at the South are startling appeals to the State and to the medical profession. Can nothing be done to prevent this awful waste of human life? Must this grief of a desolated population continue to arise? The experts in sanitary science have told us that thousands of the deaths at Memphis, Grenada, and New Orleans were in consequence of municipal violation and neglect of well known sanitary laws. Somebody has blundered. From what we

know in our own State of the powerlessness of medical authorities in such matters as the cleansing of sewers and streets, it is to be feared—indeed, it is known, that Tennessee, Mississippi, and Louisiana, like New York, are not at all awake to the necessity for medical supervision of the housekeeping of all towns and villages. The principle that, in order to promote public health, the town, the village, and the city must be as rigorously cleansed as the body of an individual, must be taught by us, until the people everywhere understand that the care of the public health is one of the highest duties of the officials of the State.

How can we hasten the day? It is a mistake of the poets that a good cause must certainly prevail. Many an honest and wise effort for the advancement of the human race has been strangled in the hour of its birth. Many a persecution has successfully stamped out a growing crop that promised a blessing to its time, and has left only blood and desolation in the mark of an iron heel. However good a cause, it needs advocates and an impartial judge. It is true that the eternal years of God belong to truth, but it is also true that error and sin are often triumphant for a time that is interminable to its victims.

> "No; things will never right themselves.
> 'Tis we must put them right."

Two things must earnestly be seen to by us, if we will hasten the day when the medical profession shall assume its true relations to the State. They are unity of action and a jealous regard for our reputation as a profession.

In one of the conflicts of opinion in the medical profession that so often occur in all large bodies, an astute and experienced layman of New York remarked to a medical man who wished to secure his aid on one of the sides which had been formed in the profession: "If the gentlemen of your profession could simply agree with each other, you could rule the city." It is certainly true that, if on the sanitary and medico-legal questions of the day we were united, we could accomplish in a few years that which, with our present modes of action, will require decades. When Benjamin Franklin was endeavoring to arouse the Colonies to resistance to the exactions of Great Britain, he circulated among the doubting and divided patriots an emblem of a serpent cut into thirteen parts, and accompanying it the motto, "Join, or die." Whether we are dissevered or united, we shall still exist as a profession. So long as man is subject to accident and disease we shall form an integral part of the commonwealth, but the prominence and proportions of that part will depend upon our individual integrity, our wise delibera-

tions, when assembled in council, and our unity in action when our deliberations have closed. We are an isolated class as we labor in the tenement-house and the hamlet, the hospital and the palace, always with the suffering and the dying, harassed and worn by our self-imposed weight of human care, and our voice may seem only as one crying in the wilderness, as we lift it for reform; but as we gather to-night, the honored and experienced head of age side by side with the enthusiastic smile of youth, the dullest can see, that while we are without pomp, banner, or emblem, we may yet be a power in the State.

If we desire to be an influential body in the affairs of the State, we must always be jealous for the honor of our craft. The achievements of individuals must become the property of the whole profession. They should be as tenderly and safely guarded by us as are the battle-stained and bullet-torn flags of regiments that have been through the valley of death. No personal considerations should ever induce us to decry the fame of men whose accomplishments have given American medicine an honored name all over the world. If there be nakedness to cover, let us step backward filially, with our faces turned, while we throw our garments over it. With united front, let us who struggle for the prolongation of life and the mit-

igation of disease, continue our advance in the same column with those who, by cultivating the soil, by humane and wise legislation, and the administration of law, by the finding out of many inventions, by the inculcation of the principles of morality and religion, contend for a land and a time when "the wilderness and the solitary place shall be glad for them, and the desert shall rejoice and blossom as the rose," and the Eternal God shall wipe all tears from the faces of men.

VIII.

HOW SHOULD OUR HOSPITALS BE GOVERNED?

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ALL the people in the city of London, and perhaps many in England, who take an interest in the care of the sick poor, have been lately very much disturbed by a serious agitation in the management of one of the best hospitals of the British metropolis. This disturbance—for the trouble has been, and is serious enough to be called by that name—occurred in Guy's Hospital. This hospital is by no means the oldest in London. St. Bartholomew's in Smithfield, and St. Thomas's on the Thames, over Westminster Bridge, ranking it in that regard. But it is one of the most celebrated and best in London. It was founded by Thomas Guy, a bookseller, in 1723. He is said to have made the fortune which enabled him to endow this great charity, by the rather incongruous occupations of selling bibles and engaging in the South Sea Bubble Speculation. The medical school in connection with

Guy's Hospital has been served by such men as Sir Astley Cooper and Dr. Bright. It is perhaps the leading medical school in London. In this hospital, such a serious disagreement has occurred between the managers or governors, who are laymen, and the medical staff, that it is believed that the entire question of the proper management of the charity, will be brought before Parliament at its next session.

Those who have read what has been said in some of the preceding pages of this book, in regard to hospital management, will know that such outbreaks are no surprise to the present writer. Indeed, they are what is to be expected under the present system. A few years ago a very serious disagreement, from causes similar to those which have produced the trouble at Guy's, occurred in the Presbyterian Hospital of this city. The outcome of this trouble was the resignation of the majority of those of the medical staff who had not already been dismissed. After this, perhaps the largest assemblage of physicians that ever came together in the city of New York, in a carefully prepared set of resolutions, applauded the action of the medical staff, and denounced that of the governors.

There was but one physician on the board of management, and yet in consequence of this trouble

with the doctors, several of the most influential of these resigned also. The misunderstandings, embarrassments, and ill feeling engendered by this dispute are slowly disappearing, but it may be truthfully said that the whole matter has seriously embarrassed the managers of the hospital in their care of the trust assigned to them by the generosity of the late Mr. James Lenox. Besides this outbreak it is a matter of common fame, that in the oldest hospital in our city, there has been a kind of latent misunderstanding between the Board of Governors and the Physicians, which, while it has never attained to the dignity of a quarrel, has led to bickerings and strong language unworthy of either of the honored bodies that have indulged in the underhanded war on the other. If it were necessary many other instances quite as marked could be cited, that show the amenities of the present system of hospital government as it obtains in the United States and in England.

Before I go any farther in illustrating the difficulties in the present system of the government of hospitals, it may be well to describe just what that system is. In New York city, and I believe in most if not all of the cities of this country, the hospitals, with the exception of a few small ones, are governed by a board made up of merchants, bankers, lawyers, and the like. Rarely or ever is a

person who has received a medical education upon these boards. A member of the medical staff is never a governor. This board appoints a superintendent or matron, or both, and committees from the board visit the hospital with more or less regularity. In our country these duties, although done without pay, are usually as faithfully performed as if there were a salary attached to the office of governor or manager. No complaints are ever current that those gentlemen have neglected to keep a thorough oversight of the hospitals under their charge. In this respect we seem to be much better off than are the people of Great Britain.

Hospitals seem to be governed in London on the same general plan, that is, there is a board of lay managers who have the nominal and absolute control of the affairs of the hospital. But practically their work does not seem, if Guy's Hospital be a fair example, to have been done as faithfully as it is in New York.

Although Guy's Hospital is nominally managed by governors, only one governor, the treasurer, has very much to do with the control of its affairs. All the other governors leaving almost all matters to him, he is supreme. He has power to appoint and to dismiss matrons and direct nurses—in fact, to be a kind of dictator. So important is the office of treasurer in London that that official in

St. Thomas's Hospital* "built a new hospital at a cost of £600,000, utterly refused to listen to the advice of those who knew about hospitals, and thus crippled for an indefinite number of years a charity in which now about one-half of the beds are occupied, and in which the governors are trying to tide over their difficulties temporarily by the reception of paying patients." At Guy's Hospital, according to the writer I have just quoted, "the recent financial administration has been so deplorable, that, notwithstanding the great wealth of the foundation, it has been necessary to close beds for want of funds, and yet the treasurer at this very conjuncture is said to have found it possible and to have thought it proper to expend £3000 upon the improvement of his official residence."

It will be seen that there is no corresponding position in the government of any New York hospital to that of treasurer of a London hospital. The use of an official residence for the philanthropist who takes sufficient time to see to the accounts of a hospital, would be considered as in the highest degree absurd. As a matter of fact the governors of New York hospitals generally attend to their duties, and do not at the worst delegate them to less than half a dozen of their colleagues. In some of them they do not delegate

* Correspondent of London *Times*, July 27, 1880.

any of their duties at all, and no work is better done than that done by these managers.

But we are children in these matters as compared with the citizens of London; when we get to be older the flagrant abuses of a bad system will occur. Just such perversions of a great trust, just such neglect of official duties, as have occurred and have been permitted at St. Thomas's and Guy's will be found in the management of our hospitals also. The trouble at Guy's seems to have been precipitated by a lady, Miss Lonsdale, who wrote an article for the *Nineteenth Century*, entitled "The Present Crisis at Guy's Hospital." Miss Lonsdale is an accomplished Christian gentlewoman of England, who has taken up the overseeing of nursing as one of the occupations of her life. She spent some six weeks at Guy's Hospital in practical work, after a change in the matron and nurses had been made, and came to the conclusion that the previous system of nursing had been very bad. Her views, or similar ones, had influenced the treasurer to such a degree that he had removed the matron, and she in her turn nearly all of the old nurses. All this seems to have been done, as such things are constantly done in hospitals, without any consultation with the medical staff. They were suddenly confronted with a new *regime*, with its new regulations, without so much as a courteous state-

ment that these changes were about to be made. The reader can imagine the consternation caused to the medical men of a large hospital, when they suddenly find strange faces at all the bedsides, and where rules which allow the head-nurse to be habitually absent when the doctor makes his visit, are put in force. The trouble and disagreements became very marked and numerous. In the midst of them Miss Lonsdale published her first paper in the magazine which has just been mentioned, and since then the war between the laity and the profession has gone on only to be interrupted by the summer holidays. It will be renewed when the "season" begins in London.

I will quote some passages from Miss Lonsdale's paper. They will give an idea of the spirit of the attack upon the doctors, and as I believe an idea of the nature of misunderstandings that are inevitable when the rightful authorities, the medical men, have no power to carry out their plans, and when the plans of people less qualified are enforced in spite of their protests.

"Until comparatively lately our hospitals have been nursed by women drawn mainly from the class to which the domestic charwoman belongs, who, having received no kind of training whatever, were perhaps first taken into the hospital after a superficial inquiry, or no inquiry at all, has been

made into their character, in the position of scrubber or ward-maid, in order that they might see and learn, as well as they could, what went on there. . . . .

"Physically and morally untrained as they were, they were then immediately liable to be put in charge of patients who were more or less seriously ill, by day or by night as the case might be; the main duty which was inculcated on them from their first acquaintance with hospital work being that they must study the character and special requirements and fancies of the particular medical man or surgeon under whom they were placed, with a view of gaining his approbation by every means in their power. . . . .

"She [the nurse] came back at the regulation hour, more or less the worse for drink as the case might be, and went to bed to sleep off the effects of it; no inquiry was made into her condition, since it was nobody's business, as long as she satisfied the medical men by the work which came under their notice, to ask how her hours off duty were spent, or what her own moral condition might be. . . . .

"I do say that, as a rule, their [the nurses] moral character was unsatisfactory."

After Miss Lonsdale has compared trained nurses with those characters which she has described with

such a free hand, she wonders "why certain members of the medical profession, who are on the acting staff in hospitals where there is a large medical school, should oppose with remarkable pertinacity the employment in their hospitals of the intelligent class of trained women who are supporting the new system. They carry their opposition so far as to affirm that under the old system, if the nurses were drunk and dissolute, it was of no consequence, so long as, as far as they could see, the patients did not suffer. This saving clause, 'as far as they could see,' is perhaps one clue to the strange pertinacity of the doctors. . . . .

"A doctor is no more necessarily a judge of the details of nursing than a nurse is acquainted with the properties and effects of the administration of certain drugs. . . . .

"I ask, are not practices and experiments indulged in by the medical men, and permitted by them to the members of medical schools, which it is understood had better not be mentioned beyond the walls of the hospital. . . . .

"Under the old system, doctors and students alike were at no trouble to consider either their own manners or the feelings of the nurses, and there was little occasion. They became accustomed, therefore, to behave in wards exactly as their natural disposition prompted them. . . . .

"Yet this unconscious restraint might in time prove powerful to smooth down the roughness of medical students, who are, as a rule, universally acknowledged to be uncouth."

It is no wonder that an article containing such sentences as those which have been quoted, should have caused a great stir in the medical world. It will be seen that it is plainly charged that the doctors had either shut their eyes to or connived at incompetency and, worse still, at immoral practices, going on with the nurses, medical students, and, finally, with the doctors themselves. It is taken for granted that medical students are uncouth; but the statement of all most liable to criticism, although not the most offensive, is the one in which doctors are said to know nothing of nursing. A perfect storm of indignation was excited, and many answers were given to these statements by eminent medical men connected with the hospital. It was clearly shown, as anyone will see who will take the trouble to read the answers in the *Nineteenth Century*, that Miss Lonsdale had been incorrect, and inconsiderate at least, in many of her statements. Sir William Gull says of her article, "The tone in which she has written of all concerned, whether medical men, students, or nurses, is exaggerated, disrespectful and unfair."

In another article Miss Lonsdale took occasion to modify what she had stated so broadly, and says, "Nothing is so much to be deprecated as any breach between the doctor and the nurse, whose hearty co-operation is essential to the comfort, nay, it may be to the recovery itself, of the patient. Any concession that will insure this happy result of concord, short of the conception of rightful authority on the part of the doctor over nurse and patient, should cheerfully be made."

Worse than all this wordy discussion, a case of maltreatment of one of the patients, which was decided to be one of manslaughter, occurred in the wards of Guy's Hospital after the new system of nursing, so arbitrarily instituted by the treasurer, had been established. The manslaughter was committed by one of the nurses of the new *regime*, for which she is now suffering the punishment meted out to her by the judge.

Carrying out the principles initiated by Miss Lonsdale, thinking that doctors know no more of nursing than nurses do of drugs, this nurse dragged a feeble patient, without orders, to a bath, from the effects of which she died. Certainly there is a crisis in Guy's Hospital. At this moment the matron and the medical staff have no communication with each other. The treasurer states, in answer to the house physicians, that he "did not care for the opinion of

eight frivolous young men."* One of the lesser evils of the present system of the government of hospitals exclusively by gentlemen who have no medical education is shown in this answer of the treasurer to the house doctor. These "frivolous young men" are graduates of a medical school, are generally enthusiasts in the study of medicine, and often highly educated. They are often contemptuously treated by the lay authorities of a hospital, while as a rule they are on the best of terms with their superiors on the medical staff. Naturally enough they do not consider a trained nurse, no matter how blue her blood, or a treasurer, no matter how great his financial skill, as their superior in matters involving a knowledge of medicine and hygiene. Frequent collisions and a good deal of bad temper will be seen, if boards of governors and managers continue to be made up of men who think that young doctors are necessarily ignorant and frivolous young men. Let their superiors be men whom they willingly admit to be possessed of much more knowledge and experience in the medical management of a hospital than themselves, and they will be found as tractable and serious as can be desired. In regard to the matter which precipitated the trouble between the treasurer and the doctors at Guy's, there ought to

* Letter of House Physician, *Times*, August 11, 1880.

be no misunderstanding in the minds of the public at large as to the position of medical men.

Despite all the statements of such enthusiasts as Miss Lonsdale, physicians have always been anxious to secure the very best nursing. But it may be frankly stated at the outset, if a crisis is to be forced upon us in New York also, that doctors will never submit to any system of nursing which assumes to take any responsibility on the part of the nurse that ordinarily belongs to the physician. We might as well understand that every good physician believes that he knows more about nursing than does any nurse; no matter at what school she was graduated, no matter to what family she belongs, no matter what doctors coached her in her calling. Not to know about nursing, as has been stated over and over again in the discussion in London, is not to know about the practice of medicine. To give up the control of the patient to the nurse is to give up the control of the treatment of the case. No man who has any respect for himself or his calling will ever submit to either. It has been foreseen by thoughtful men in the profession that a new system of nursing would bring with it some new dangers. Whether a little learning is dangerous or not is a question not yet fully answered; but that a little learning in the possession of persons of certain temperaments

is very dangerous, if they are entrusted with power, will generally be conceded. Trained nurses, as they now obtain in New York, are very warmly welcomed by the profession as a new aid in their work; and unless they assume authority such as the disciples of Miss Lonsdale at one time attempted to assume in London, they will meet with the same cordial, thankful treatment in the future as they have received in the past.

This question whether nurses are responsible to the matron and the treasurer or to the doctors, is only one of the many subjects for disagreement that will exist so long as the medical staff are not fully represented on the boards of management. The *casus belli* in the hospital in New York, which I have mentioned, was the dismissal of several of the visiting staff by the governors. Yet these men were not actually dismissed. The governors simply refused to re-appoint some of them, without assigning any special reasons for their refusal. Such appointments are usually supposed to be during good behavior and competency. A dismissal in this manner, without a hearing, in the language of the chairman of the mass meeting of physicians, was considered as an "affront," and as such it was resented. A doctor's position as an attendant to the sick in a hospital, should be the same as his position with

relation to his patients in a private house. And yet how different are his relations in these two conditions. When a physician is called to a patient in a private house, he has absolute control. The servant who opens the door for him, and the nurses who assist him, pay him the most complete deference, not only in manner but in deed. If he should order every window in the house to be opened every ten minutes in the course of the day, that order would be carried out, or the physician would be dismissed and another one called. But so long as he is in attendance he is absolute master of the situation.

Now, why is all this reversed when the number of patients is multiplied by hundreds, and the scene of their illness is transferred from the luxurious chamber of the rich to the wards of a hospital? Why is it that, all at once, doctors are supposed to be unable to make the orders upon a large scale which they had been making upon a small one? It is simply because the profession in the beginning abrogated the powers which rightfully belong to them. Probably at first it was for the sake of convenience; and probably it was not foreseen that the day would come when, unless they asserted their full rights in the management of the sick, the most serious consequences would follow. The only remedy for this state of things is to at

once reform the management of every hospital which now has none of its medical staff upon the board.

The difficulties between medical boards and boards of management are now so frequent, that they are matters of common talk in many institutions. Speaking metaphorically, such bodies are often in the attitude of hostile cats glaring at each other, with malice in their eyes. In all the other relations of life, the men who compose these two bodies get on very well. It is not a matter of the men who make up these boards. These feuds depend upon the bad system which prevents doctors from having a fair share in the government of hospitals that could not live a day without their services. From what is known of the sessions of the boards of governors, one of the questions often discussed by them, roughly stated, is, "How shall we get on with our cranky doctors?" They will never get on properly with them until the medical staff is fairly represented in the control of the hospitals which they serve.

This unfortunate state of things is primarily due to the neglect of physicians to claim their rights.

It is perpetuated because hospital positions are so important to scientific medical men. They are afraid to agitate the question on which they feel

so deeply, lest they may lose the places which they would much prefer to retain, even embarrassed as they often are in holding them. As yet plenty of medical men, not always, however, of the highest ranks, can be obtained to fill the places of any who resign because the carrying out of their proper functions is interfered with.

How should a hospital be governed? We have not far to seek for an answer. St. George's Hospital in London is governed upon what the present writer believes to be proper principles. "The board of governors is composed of gentlemen of all professions, the members of the medical board being equally eligible with others for the position. Each governor must subscribe as much as five guineas a year to the institution, and they meet as a 'weekly board' every Wednesday. To this meeting every governor is entitled to come, and when there he is entitled to speak and vote upon any question which is brought forward. The medical officers of the hospital are governors like others, by virtue of their subscriptions, not *ex-officio*, and they also can speak or vote as they please. This system does not work confusion. The board-meeting, as a rule, is composed of a small number of governors, who attend regularly and are conversant with the routine business, so that they represent all the usefulness of a committee, and the doctors,

or some of them, are nearly always present, and thus, if any suggestion of which they disapprove is brought forward, they are able at the very beginning to explain the light in which it appears to them. If any sweeping change were to be attempted, governors who seldom attend would come, for the special occasion, to support or to oppose it. The result of all this is, that although the medical staff are a small minority among the governors as a body, they have opportunities of being heard which are denied to them elsewhere, and they bring their special experience of hospital requirements to bear upon the beginning of every important discussion." *

This is the way in which a hospital should be managed. There are small hospitals in New York and Brooklyn in which, practically, the same system of medical added to lay governorship is carried out. I appeal to the thinking public and to the medical profession itself, to reflect and act upon this subject. By speedy reform in this matter, our New York hospitals may avoid such a conflict as in one instance has already occurred here, and such serious disaster as now threatens Guy's Hospital in London.

* Correspondent of London *Times*, July 27, 1880.

MEDICAL NEW YORK—OLD AND NEW

IX.

MEDICAL NEW YORK—OLD AND NEW.

An Address Delivered at the Inauguration of the New York Post-Graduate Medical School.

THE recollection of the oldest inhabitant of Paris or London does not run back to the time when each of these cities was not a great metropolis. The traditions of these great centres are those that belong to vast populations. From time immemorial they have contained crowded streets, long lines of shops, grand cathedrals and the other attributes of great towns. New York may well claim to be a metropolis; her vast commerce and her million and more of people are sufficient to justify her claim. She is certainly a mother city now. But she is a modern metropolis. Her traditions are those of a provincial town, vying with Boston and Philadelphia and Newport for the honor of being a chief city in a frontier country. There are probably New Yorkers in this assemblage who remember the time when the pigs ran about Broadway, and when every family that kept a carriage was known by name and by sight by the average citizen.

The rapid growth of New York offers an explana-

tion if not an apology, for many of the imperfections that exist in the management of her public affairs. We can hardly expect of an overgrown and awkward boy the culture and understanding of a man. It is difficult for one who has seen with his own eyes the wondrous change that has converted New York into one of the centres of the world, to realize that the things and methods that were suitable for a small town will no longer fulfill the requirements of a great city. The changes that are so marked in the commercial and social life of New York are none the less decided in the position of that profession which, through some of its representatives, has solicited and secured your presence to-night.

New York as a town containing a few doctors, one small medical college, with a hundred medical students, offers a great contrast to the medical metropolis that we live in to-day. If the consideration of such a theme before this audience needs any apology, it may be found in the fact that much of the good health of the city and the nation may depend upon the character and wisdom of a resident profession that annually sends out five hundred or more new doctors to practice with drugs and cutting instruments.

At one time, a little before 1841, the one medical college of New York was so little known or was so obscurely situated that an aspiring student, now a distinguished professor, could not be directed to it by the

gentleman to whose office he went to begin his medical studies. Yet this was the day of Mott, of Kearney Rogers, of Griscom the elder, and of Alexander H. Stevens, of Hosack and of Francis. The New York Hospital was upon Broadway, in front of Pearl Street, its grounds covered by green grass and studded with ancient trees. This hospital and not the college was the surgical and medical centre of the city.

A great change was about to come upon the existing system of medical education, but the college hardly knew it. The men at the hospital did. They knew that the learned essays, the eloquent harangues must give way to colloquial instruction in the presence of the patient. In these days the colleges have learned that medicine and surgery cannot be taught like law and theology. They are fast becoming vast dispensaries, dissecting-rooms, and laboratories. The science and practice of medicine are taught by facts and not by theories. In these quiet times in the medical New York of some fifty years ago, there was but one dispensary, and that was scarcely ever used by students. There was an occasional invitation to an operation in the small amphitheatre in the hospital. There were, however, brilliant triumphs in surgery; triumphs that made American surgery famous, and which will make doctors talk of the surgeons of those days as long as they talk of anything.

There were also excellent and wise general practi-

tioners. They had no thermometer, but the *tactus eruditus* stood them in good stead, and they often made prognoses that we who are reliant upon instruments of precision might envy.

> "Far from the madding crowd's ignoble strife
> Their sober wishes never learned to stray."

Unambitious beyond the ambition to serve their patients, they reverently consulted the treatises of the fathers, or the essays and cases of their contemporaries across the sea. In those days a New York doctor had no idea of writing a book, perhaps not even of reporting cases in print. At the very most, he might contribute reports of his cases to one of the few journals, but if of a literary turn of mind he contented himself with editing the work of an Englishman or of a Scotchman, or perhaps he translated some French writer. Almost with bated breath did these men, some of whom are worthy to be compared with the best of our time, speak of the medical men of the old world, separated from them as they were by not only thousands of miles of sea, but more than all, by lack of opportunity for mutual intercourse, for self-instruction, such as London and Paris gave in good measure. Little did they think of the day of the Flints and Dalton, Sims and Thomas, of Emmet, Hammond, Jacobi, Hamilton and Barker and Sayre, and many others, of the time when American text-books are

on every table in trans-atlantic medical libraries, and are quoted at every lecture in European clinics.

In those times the doctors knew each other not only by name, but so well as to enjoy a joke at the expense of one another's personal characteristics. They stopped each other on the street and talked of the weather and the politics of the day. Indeed Hosack and Francis interested themselves in all the social and literary affairs of the time. At No. 1 Bond Street was a drawing-room whose Saturday evenings attracted the wits of the town, as well as those who might be temporarily in New York. That age was not all golden, however. There was opportunity for envy and cabals, for gossip and slander. The medical profession then as now was somewhat belligerent, and not always in a good cause. There was too much reliance upon foreign opinions, too little upon the great authority, the exact and intelligent study of the patient himself. While we have necessarily lost some of the restful attributes of life in a small town, the life among medical men is on the whole broader and better than it was fifty years ago. In these changes for the better New York easily takes the lead as a metropolitan city should. Even in her code of ethics she has, during the last year, unlike her sister medical cities, taken a step which shows that she believes the conduct of a gentleman cannot be defined by a set of rules.

The steamship, the railway, the telegraph, and the

telephone have made changes in medical, as well as commercial New York. Depau Row is no longer up town nor is Chambers Street the centre. All the surgical wisdom of the city is not to be found in the New York Hospital. The consulting-rooms of our physicians are now filled with patients from San Francisco as well as from Bound Brook and Newtown, and all are anxious to get away by the first afternoon or evening train. There is no longer a *rus in urbe* on Manhattan Island, since Harlem Lane has given place to St. Nicholas Avenue.

It is unfortunate for New York, that the business men have been the chief ones to recognize this change in the city. They are quick to exchange their cargoes from sailing ships to steamers, to build immense warehouses, and to connect this market with the others of the world by the most expeditious means. They at least know that New York is no longer a rival of Newport. But New Yorkers have been slow to learn that their city has become an educational as well as a commercial metropolis.

Some years ago I attended a public dinner in this city, at which one of the speakers was the mayor. The dinner was given by the alumni of one of our medical schools, and the chief subject of discussion was the advantages offered by the metropolis in the way of professional study. In the mayor's speech, he expressed some surprise that New York should be

thought to be anything more than a commercial town. This mayor was one who stands high among his predecessors and successors in character and intelligence. He had taken an especial interest in educational matters, and yet it was a new idea to him that New York perhaps might be, or already was, a university centre.

But it is not strange that the chief official of this city took such a view. Our public men have not been educated to take any other. In Boston, when President Eliot wants a hundred thousand dollars for Harvard College, he walks down Beacon Street, and, without pulling a door-bell, he finds the son of a Puritan who will give it. In Philadelphia, the new provost of the university calls together the best representatives of the city to aid him in the management of his great charge, and he finds everywhere sympathy and support. In Boston, no rich man can be properly buried who has not left some money to Harvard College, the Medical School, a hospital, or the Institute of Technology. In New York, half a dozen men, with money enough to endow Columbia College and the University, besides creating a thousand free beds in a hospital, die in one year and do not mention New York in their wills. It is the great stamping-ground, however, for the man who wishes to plant a new denomination in a parish already having one to each fifty people. Peripatetic presidents of Tuscaloosa and Oshkosh Universities wander about from one

banking-house and private dwelling to another and try to enlist the sympathies of every moneyed man in the community. And at public dinners of the academic institutions, where there are a hundred men who have acquired their professional education and have made fame and wealth in New York, the collection-box is passed about again, till New York charities and professional schools are in despair at any recognition of their claims.

I have heard New York accused of a want of civic pride. Be this accusation just or not, she has certainly not appreciated her great position as a place for extra academic, for professional, or, as I prefer to say, for university study. For example, the University of the city, founded with a broad and comprehensive charter by men whose ideas were far ahead of their time, now that her opportunity has come, chooses to hug her feeble little college, rather than lift on her strong arms the noble university that rightfully belongs to her. In her professional schools of law and medicine, in the addition of others, is her great work, for New York parents have long since resolved that college boys are better off in New Haven, Princeton, and Williamstown than in a vast city.

Columbia College was very loath to begin her scientific school, now one of her chief glories, and she is very slow indeed to use her enormous advantages of wealth and renown for that which is her great future.

The medical school of that college contains, perhaps, twice as many students as does the academic department, and yet it remains unconnected with it except in name. The school of law also out-numbers the undergraduate department, while its fame is as wide as the limits of the nation.

New York has not kept pace with the small towns in the number of her undergraduate students, or in the reputation of her colleges, but her professional schools have been for fifty years growing in magnitude and importance. New York now has more than two thousand medical students. Her hospitals and dispensaries have increased until they can scarcely be named off-hand. Yet the medical colleges continue to be private and proprietary institutions. Their teachers are, I believe, among the best of our country and worthy of any country. But while Boston and Philadelphia are making vast strides in improving the methods of instruction, New York is obliged, from lack of endowments, to hold on to the old plan. Those who have studied one, two, and three years sit upon the same benches, hear the same lectures, and crowd the same wards and amphitheatres. There is no matriculation examination, and, unless in exceptional cases, but one final one at the end of three years, of what is in some cases merely nominal study. Graduates in medicine, who came here for special study, so far as they heard lectures at all, heard the same that were given to undergraduates

under the conditions I have described. In fact, the changes of the time have not been appreciated by the educated and wealthy people of New York. Immersed in their own affairs, untaught by those who should have taught them, so far as they have taken an interest in educational matters, it has been chiefly in public schools and colleges, while professional institutions have scarcely been observed by them. Medical men have been remiss in not educating their fellow-citizens upon these subjects. Although medical teachers have been enlarging their curriculum and increasing the number of their teachers in the colleges, the growth has been chiefly at the top and not at the foundation of the structure. No fundamental changes have as yet been made in New York medical colleges.

What relation has our present enterprise with a reform in medical instruction in our city? Certainly it has nothing to do with undergraduate reforms. However much as individuals we may be interested in such changes as shall cause a New York medical diploma to be evidence of fitness to practice, the school which we inaugurate to-night has nothing to do with this subject. Our object is not to make more doctors, but to improve those we have. We propose to make a centre in which it will be possible for a graduate in medicine to fit himself for the detection and treatment of the diseases that are not fully discussed in the studies and lectures of the ordinary course of three

years in a New York medical college. It is true that the various subjects upon which our lectures and demonstrations are given are treated upon in these schools. There is a weekly lecture upon most of the subjects, besides, in the course upon medicine, surgery, obstetrics, anatomy, there are incidental allusions, more or less full, which, if availed of, give the graduate a general knowledge of what have come, rather unfortunately as it seems to me, to be called specialties. But, and it is this *but* which furnishes a reason for our existence, there is no such knowledge furnished as will enable a man to recognize and successfully treat many of the common ailments of men and women. Even a hospital training of from one to two years, which unfortunately but a small proportion of our graduates are able to secure, leaves many subjects practically untouched. Honest practitioners confess at once, with much embarrassment, their lack of knowledge, much more of experience, in many cases, and, if possible, ignore their existence when they cannot send them to men whose opportunities in these departments have been sufficient. Many others, equally honest, living in places remote from large towns, seek by means of text-books and their knowledge of the general action of disease, to do what they can, but even these must leave much untouched. If proof of this statement be desired, it is easily furnished in the crowded clinics of the medical colleges of small towns. There

patients are furnished by the score or even hundred, who await from year to year the arrival of special professors who have been chosen to supplement the regular faculty.

Many practitioners come to New York every year to acquire the practical knowledge of diseases called special, but which they find to be very general, and of which they were taught very little in their fifteen months of attendance upon lectures. What can they do? They may matriculate at any of our colleges, and in the dissecting-rooms, if it be anatomical knowledge they desire to supplement, the facilities are ample and excellent. Of late years, too, the dead-houses have also done much to instruct the general practitioner. He can, besides, with some trouble of inquiry and running about, find special courses in diagnosis, where experts will furnish excellent practical teaching. If, however, he seeks in the lectures upon special subjects in the colleges that which he must acquire in a short time or not at all, he finds himself baffled and disappointed. He soon finds that these weekly lectures and demonstrations are for those who have no practice behind them, whatever may be before, for those who have the whole five months of the session at their disposal. Besides, the classes are so large, that only the early and persistent men on the front benches have an opportunity to study the cases with the teacher. Even for those who find the courses they desire in the dispen-

saries and hospitals, the difficulties are by no means insignificant. There is no central place where they may find what they desire. This centre we hope the New York Post-Graduate Medical School may furnish. But it may be said that existing medical schools should furnish these facilities. This we fully admit. At least the corporation, which should be at the back of the teachers, should have a post-graduate as well as an undergraduate school, or the course should be lengthened to include it. This is the ideal medical department of a university. But ideals are not always to be obtained. Certainly this ideal is not yet to be obtained in New York. A man who quarrels with the inevitable is not wise, but he may flank a difficulty. He may not be able to get out of the wet, but he may wear a Macintosh and carry an umbrella. I think the colleges would be greatly the gainers by this enlargement of their scope. But as proprietary institutions, without an interested corporation to sustain them, and without invested endowments, they believe that undergraduate instruction is all they can properly undertake. It would be easy to show that Berlin and Vienna have acquired their preëminence as medical centres, not by teaching undergraduates, but by the instruction furnished to medical men. The practitioners who have spread the fame of Helmholtz and Virchow, Traube and Ludwig, Langenbeck, Arlt, Graefe, Skoda, Braun, Oppolzer, Politzer, and Gruber have been in large

measure graduated physicians, who have sat at the feet of these great teachers after their fundamental studies had been finished.

A few weeks ago your speaker had the opportunity of looking over the new building of the famous school of medicine of the University of Edinburgh. Nothing can exceed the excellence and grandeur of the arrangements for the study of anatomy, physiology, and so forth, as exemplified in the new structure of this renowned and in some respects model university. My guide, one of the instructors, said to me, "What we need now in Edinburgh to attract the men who go to Germany, are better provisions for graduates. In that we are deficient. For that cause we are losing, and have lost some of our proper fame." If this be true of Edinburgh, how much more true of New York. This city of ours stands without a successful rival in the country in the opportunities she can furnish to the medical student. This statement may seem a trifle strong to our neighbors in Boston and Philadelphia. I will, however, leave the students who have seen the advantages offered respectively by these cities to justify my statement. New York is now, and, unless some great disaster overtake her, is destined to continue to be the commercial metropolis of the Western world. If common wisdom direct the beneficence of her citizens, if her civic pride can be aroused, in spite of Baltimore and the Johns Hopkins, New York will

be the university centre of America. In devotion to this chief city of my native Empire State, I have felt for years that it was my duty, which nothing can deter me from, to cry aloud as to the importance of effort which shall one day accomplish this end.

> "May I never
> To this good purpose that so fairly shows
> Dream of impediment."

The elements which are yet to be fused to this form are all about us. That our school may be one of the agencies in continuing and securing our intellectual preëminence is the earnest desire of those whom I have the honor to represent. We cannot believe that it will always continue in its present detached condition. Our aspirations are far beyond those of a school whose affairs are controlled by those who should be busied chiefly with teaching. It will yet be a part of a great university.

Circumstances over which we have no control have compelled us to add another unendowed school of medicine to those that now exist. But we have no idea that it will remain so. When we have demonstrated our usefulness and the necessity, we shall seek an endowment at the hands of our fellow-citizens. We believe that we shall see the day when New York will first nourish her own children before she is generous to others. We also believe that the governing

bodies of our universities will yet make them so in fact as well as name, that medical colleges will become an actual part of them and that then the post-graduate medical school will have its appropriate place in the third and fourth years of study. Not division, not separation, but unity in university instruction is what we seek, and what we believe our institution will ultimately promote. We shall belittle our power and fail to exert our proper influence, if we do not all, merchants, lawyers, clergymen, and physicians, soon recognize the fact that not even Prague in the thirteenth century, when thousands of students came to her halls on the banks of the Moldau, had a better claim to be a university town than New York has in the nineteenth.

London has not been wise in dividing her medical profession into a large number of medical schools. Some of her influence has been lost on this very account, and I speak, not from the superficial opinion of Americans who have visited and studied in the metropolis, but I give the deliberate judgment of one of her most successful and eminent practitioners who has lately visited New York.

Paris, Berlin, and Vienna have obtained their enormous power over medical action and thought, in part, at least, because the faculties of their great universities have comprehended nearly all the men in the cities who have been competent and willing to teach medicine. There has been concentration of effort at

one centre. For that consummation, I earnestly hope for New York.

Within the memory of many of us, Italy, dissevered and separated into petty kingdoms, has been united by the patient genius of Cavour, and now she is a united and powerful country.

Germany also, by "blood and iron," has again become a nation, and her power in the councils of the world greatly increased.

I trust there will arise for our beloved city of New York, not a Cavour or Bismarck, but such a wise understanding on the part of her citizens that they shall with one accord strive for a unity of plan and action which shall unite all her scattered, unknown, and undeveloped energies, and cause her to be everywhere recognized and resorted to, as the great university centre of our side of the Atlantic.

JAMES LAWRENCE LITTLE, M.D.

X.

JAMES LAWRENCE LITTLE, M.D.,

*A Sketch of his Life and Times.**

JAMES LAWRENCE LITTLE was born of Scotch-Irish and English ancestry, in the city of Brooklyn, February 19, 1836. He attended private school in his native city until he was about twenty years of age, when he attempted to become a book-seller, and to this end was engaged as a clerk in a Fulton Street establishment kept by Mr. Riker. The firm that employed him had a stock of medical books as well as of general literature. The young clerk was soon so deeply immersed in the study of these books that he proved a very inefficient salesman, and he gave up his attempt in business.

This inclination to the study of medicine had already been seen in young Little when he was a mere boy. After much cogitation as to the ways and means of getting a skull for the purpose of study, he finally approached a venerable African grave digger, who consented to furnish him with the desired relic, if he would

* Read before the New York Academy of Medicine, November 5, 1885.

bring twenty-five cents and a paper to wrap it in. Little secured the treasure on these terms, and returning home, took a peep at it, and, to his youthful horror, found that it was an unprepared skull looking upon him in the ghastly covering of facial integument and scalp. Fear got the better of his anatomical enthusiasm, and seeking a plan to get rid of what was now a source of dread at its horrible aspect, as well as of fear lest he might be found with such an unexplainable object upon him, he threw it into the waters of Wallabout Bay, and postponed his medical studies for a season.

After leaving the bookstore, Little entered the office of Dr. Willard Parker as a private student, and at the same time he matriculated in the College of Physicians and Surgeons. After Dr. Little had become a distinguished surgeon, Dr. Parker gave the writer an account of how he nearly rejected him when he applied for entrance to his already crowded rooms. He was at first disposed to decline to receive another student, but he was impressed by the great earnestness of the tall and handsome young man, and he consented to take him. "But," continued Dr. Parker, "I never had occasion to regret my decision. Punctually as the clock struck nine, the click of the young man's boots was heard upon the doorstep, and I got to recognize his step and to count upon him, whoever failed." The word *click* aptly describes the short and

quick step, that many of Dr. Little's contemporaries will recall as one of his personal characteristics.

After being in Dr. Parker's office more than two years, he successfully passed a competitive examination, and was appointed a junior assistant in Bellevue Hospital. This appointment did not take effect until the following spring. Meanwhile, in March, 1860, he was graduated at the College of Physicians and Surgeons. He then resigned his position at Bellevue, and after examination he was appointed junior assistant in one of the surgical divisions of the New York Hospital. A resignation of a place in one hospital to take a similar one in another, was something unusual, and it was said at the time that it caused a little unpleasant feeling among the staff at Bellevue, for Dr. Little was well known to some of them, and to James R. Wood in particular, as a promising man whom it was not well to lose.

Bellevue Hospital was just coming into some importance as a school of surgery, and chiefly through Dr. Wood's clinics and his prizes for anatomical preparations offered for competition among the medical schools. Yet at that time it could in no manner compare with the New York Hospital in furnishing opportunities to a surgical student. It was an institution belonging to the city, receiving only paupers to its wards, and it was governed by politicians. It had much more importance as a school of medicine than as

one of surgery. John W. Francis was one of its consulting physicians, and occasionally gave a mellifluous and learned address in its amphitheatre, and Alonzo Clark, John T. Metcalfe and Benjamin W. McCready held clinics in the wards, while on Saturdays there was a great crowd of students to witness the rapid and skilful surgical operations of the renowned pupil of Valentine Mott, James R. Wood. Certainly any young doctor in medicine might have been honored by entrance into such a hospital. But the New York Hospital was a wealthy and private corporation, governed by some of the best laymen in the city, and, more than all, it was one of the most renowned schools of surgery in the world. In its amphitheatre Wright Post, and Kearney Rodgers had won their fame, and there Valentine Mott, who was still living and lecturing upon surgery, had tied the *arteria innominata.* Mott was a consulting surgeon with Alexander H. Stevens, John C. Cheesman, and Alfred C. Post. Of these but one now remains, an honored link to connect us to the medical New York of fifty years ago.* The active members of the surgical staff were Gurdon Buck, John Watson, Thaddeus M. Halsted, Willard Parker, William H. Van Buren, and Thomas M. Markoe. Of this number but one now survives, and he happily in full vigor of mind and body. The old hospital was situated

* Dr Post also died in February, 1886, a few months after this was written.

on Broadway, facing Pearl Street, on ample grounds, nearly surrounded by grand old elms. Its beautiful lawn, upon which tame deer might often be seen, was a surprise and delight to the strangers in New York, who came suddenly upon this break in the monotonous business buildings of a great city.

The house staff was in a traditional state of excellent discipline. Its members vied with one another in their care of their cases, and their dressings of fractures and ulcers were at once the delight and dismay of medical students who followed the attending surgeons about the wards. It was not strange, then, that young Little, especially when urged by his preceptor, resigned his place in a hospital which had no past, for one whose annals, twenty-five years ago, were more full than perhaps any hospital in the land.

In April, 1860, Dr. Little began his duties at the New York Hospital as a junior walker. In April, 1885, he died. Hence, it may be truly said, that a quarter of a century bounded his professional career. What a twenty-five years it has been for medical and surgical science in New York and in the world! There were then three colleges, and perhaps eight hundred students and practitioners attending lectures in the College of Physicians and Surgeons in Twenty-third Street, the University in Fourteenth Street, and the New York Medical College in Thirteenth Street. Bellevue Hospital Medical College existed only in the

embryo of its medical clinics and James R. Wood's exploits on Saturday afternoons. Clinical instruction was in its infancy, and there were but two hospitals, at long distances from the colleges, where it may be said to have existed in a meagre way, and then, except when a great operation was to be performed, to be attended by not more than a score or so of the students. Now, there are added to the New York and Bellevue, the great Charity Hospital on the Island, St. Luke's, the Roosevelt, the Presbyterian, Mount Sinai, and St. Vincent's; these are all more or less used for clinical teaching, and two thousand or more students and physicians attend the lectures of the three colleges of our faith, the College for Women, the Post-Graduate School, and the Polyclinic.

Among the most widely known of the teachers at the Colleges were Parker, Gilman, Watts, St. John, and Joseph M. Smith, in Twenty-third Street; John William Draper, Bedford, Paine, Van Buren, Post, and Metcalfe, at the University; Horace Green, Fordyce Barker, Ogden Doremus, and Carnochan, in the New York College; while George T. Elliot, Charles A. Budd, Loomis, Jacobi, Thomas, Sands, Sayre were, as would be said in Edinburgh, *extra mural* teachers, who were nearly within the walls. So great have been the losses by death in these names, that, as we recall them, the words of the Latin poet come at once to the mind:

" Eheu fugaces Postume Postume,
Labuntur anni."

When Dr. Little entered the New York Hospital the civil war had not broken out, although excited meetings of students had been held on account of the John Brown raid, and Southern students were being pledged not to return to Northern cities for instruction. Terrible strife was soon to cause the erection of immense hospitals by the medical staff of the United States army, from whose records surgical literature was to be enriched to an extent not dreamed of by the surgeons of this country. The battle fields of Manassas, Shiloh, Gettysburg, and around Richmond, from their awful experiences, were to train a race of men which has caused American surgery and medicine to take a higher place in the world than would have been attained by half a century of work in small civil hospitals, while the Sanitary Commission was to open up a field for the cultivation of sanitary science and of active benevolence hitherto unknown.

When Dr. Little entered the wards of the New York Hospital, the thermometer was not generally used to show the temperature of the body. The laryngoscope and ophthalmoscope had just been placed in the hands of a very few specialists, but they were not at all employed in the New York general hospitals.

There was but one hospital of any considerable importance for diseases of the eye and ear, and that had

not one-half the number of patients it now has, although three similar institutions have been added to the charitable and educational resources of the city. There were no training schools for nurses, and scarcely any trained nurses worthy the name. Those whom we had were chiefly males, with a strong preference for alcohol as a stimulant, who had been promoted from being patients to be nurses, while the women, in many instances, had been scrubbers in the wards over which they presided. Not but that there were some excellent nurses in those days, however. Pyæmia, erysipelas, and hospital gangrene were then dreaded foes, and antiseptic surgery, if practised in attempts at absolute cleanliness, was not understood as now, when patients, after operations, are saved, not as by fire, but as a matter of course. Marion Sims had just read his famous paper before this Academy upon silver sutures in surgery, and was about to found the Woman's Hospital, with Emmet as an assistant, and become the intellectual progenitor of men who with him created modern gynecology. All this Dr. Little saw, and in much of it he was an active participant.

New York, in 1860, had two or three medical journals, not of extended circulation, while an Ishmaelitish scribbler or two issued monthly bulletins in a style of medical journalism now happily extinct. There were two medical bookstores, called publishing houses rather by courtesy than as a matter of fact, for scarcely

a New Yorker but Bedford and Dalton and Draper had written a medical book, and very few had even edited or translated one. New York scarcely claimed equal rank with Philadelphia as a medical centre.

Now, New York boasts of three publishing houses where American medical books are issued, and that in considerable number. Her medical journals are more widely circulated than those of any other city in this country, and they are to be found by the side of the works of American medical men upon the library tables of the physicians of every nation.

In the hospital Little gave promise of his future career. He was assiduous and faithful as an assistant, and suggestive and enthusiastic as a house surgeon. His humorous contemporary, Dr. Samuel W. Francis, remarked of him that even then there was *multum in parvo.* He reported many of the cases occurring in the wards in the *American Medical Times.* It was while in the hospital that he devised his method of making and applying plaster of Paris splints. It is not too much to say that chiefly, if not entirely, through Little's efforts plaster of Paris splints became a practical application. Until then, although much recommended, experience had shown that it was not well adapted for a surgical dressing. Little saw in plaster of Paris a material which, if properly used, would form that so much to be desired, an immovable and yet porous splint. Those of us who were associated with

him remember his painstaking trials in preparing the plaster, in securing the proper consistency, and the material best adapted to take up the solution, the disappointment and failures until a splint was produced which convinced his colleague, the house surgeon of the other division, and the attending surgeons, that the days of the starch apparatus—a favorite bandage of the hospital—were past. In using plaster of Paris as a splint instead of a bandage, he utilized the material as never was before done, and although it is possible that it will never have a widespread use just as Dr. Little employed it, he gave an impetus to the subject which was perhaps the origin of the famous plaster of Paris jacket. His paper upon the subject may be said to be classical.*

During the civil war, on several occasions, Little's services were furnished to the Government. He was for a time surgeon-in-chief to the hospital erected on the edge of the City Hall Park, and twice, at least, after great battles, he volunteered with those other New Yorker surgeons who went to the front at the call of Surgeon-General Hammond. Now, as then, the avenues to professional success as a teacher and consultant began at service in dispensaries and clinics. Dr. Little was engaged in such work from the days when he was a medical student and a *substitute* for the

* Transactions American Medical Association, 1867, Medical Record, 1874.

junior walker in the hospital until his death. One year after leaving the hospital he was appointed clinical assistant to Dr. Parker, who was then Professor of Surgery in the College of Physicians and Surgeons. In 1863 he was appointed a Lecturer in the College. His first course of lectures was upon "Fractures and their Treatment." These lectures were continued until 1868, when his chair was enlarged to that of "Operative Surgery and Surgical Dressings."

Dr. Little was very popular as a lecturer. His manner was exceedingly simple, in fact, at first distressingly so; but it was earnest, and devoid of mannerisms and self-consciousness. One of our most successful teachers lately said to me, "Little did not merely tell the men to apply a flaxseed poultice, but he brought the flaxseed and the cloth to the lecture-room and made the poultice before the class. Then they knew how it was done for they had seen it." Indeed, his teaching was realistic to a degree. The man was thoroughly in love with his work. He was alive to every progressive tendency; he travelled in no rut, but was always on the alert to assist in making surgery the exact science it is so fast becoming. He took great pains with the illustration of his subject by diagrams and drawings, which were prepared by competent men under his directions with great care. An examination of his library after his death showed that he had ransacked the surgical pictures of Great Britain

and the Continent to secure the best illustrations for his lectures. Certain it is, that not a little of the fame of his alma mater for thorough teaching was due to Dr. Little's lectures, although they were given in the summer term, and attendance upon them was not obligatory. They were continued for sixteen years, when he resigned from the position he held in the college as a lecturer on surgery, and as one of the staff of Professor Markoe—who had succeeded Parker—and accepted the appointment of Professor of Clinical Surgery in the University of New York.

But Little's best qualities as a surgeon, a teacher, and an executive officer were seen after his appointment to the chair of surgery in the University of Vermont. This was in 1875. He had previously declined an offer of a similar chair in the Long Island College Hospital. He entered upon the work in Burlington with great zeal. There he found a medical college that still survived the vicissitudes of forty years, although those at Woodstock and Castleton, in the same State, had been abandoned. It had about sixty students. Little's keen perception of the possibilities of this field showed him that they were great. The lately elected President of the University, Dr. Buckham; the venerable Carpenter, professor of practice; with Thayer of anatomy, King of obstetrics, and, Darling of anatomy, were fully alive to what lay in store for the Burlington Medical College. There was

a reason for the existence of a medical college there. It was needed to supply the demand for medical education for a large number of young men from Vermont and Northern New York, who could not conveniently go to Boston, Philadelphia, or New York.

The academical department, at the laying of whose corner-stone Lafayette had assisted, embraced in its faculty many soundly educated and cultured men, whose sympathies were readily enlisted for any good scheme for the cultivation and dissemination of human knowledge. They seconded the efforts of the president to give character to the various departments. The medical school acquired a certain dignity by its name, and it had that not unimportant advantage over the schools that formerly existed in the same State. Many young men, exceptionally well prepared by previous training, found it more convenient to study in Burlington, on account of the greater expense attending a long stay in a large city; and many practitioners of Vermont and Northern New York found the clinics and lectures of the medical department of the University an accessible post-graduate school, which lighted up many a dark subject, and gave them a little recreation from their lonely and responsible duties as country physicians. The professor who went to Burlington from a metropolitan medical college, soon saw that he had as intelligent and as earnest listeners as at home, and that he must relax nothing in his efforts to

teach his science and art. With the hearty co-operation of the President of the University, who presided at all the faculty meetings, and his own colleagues, Professor Little immediately began to devise plans for increasing the fame and usefulness of the school. By personal solicitations in many instances, he was largely instrumental in securing courses of lectures and clinics upon subjects not fully, if at all, embraced in the general curriculum, by specialists from colleges in our city. Then, Miss Mary Fletcher, acting largely upon the advice of President Buckham and Professor Carpenter, founded a hospital, and with a broad mindedness not always seen in those who found hospitals, gave up its wards unreservedly to the teachers of the college. This was naturally of the greatest importance to the success of the school, for the day had passed when didactic lectures, unillustrated by subjects, were considered fit means of teaching medicine and surgery. Little's facilities for the performance of great operations were largely increased by the foundation of the hospital. His clinics were sought by crowds of patients from far and near. During the weeks that he lectured in Burlington, the streets of the city gave evidence, by the passing through them of numerous people with surgical dressings on some part of the body, and by the great accumulation of the mud-stained buggies of the practitioners of the adjacent towns, as well as by the over-filled wards of the hospital, that a great deal

of surgical work was going on. Stimulated largely by Little's surgical feats, and by an executive capacity heretofore, from the want of an arena, not known to belong to him, the college grew apace in character, importance, and in the number of students. A new building was given to the faculty in 1884, by the late Mr. Howard, and when Dr. Little died, more than two hundred and twenty students in the class-rooms of the college mourned the loss of their professor of surgery.

In an address commemorative of Darling and Little, Professor A. F. A. King sketches the introduction of the latter to the class in a manner so graphic and descriptive of the man that it is here reproduced. Dr. King says: "I introduced him to the class, and I well remember his modest embarrassment, which would, however, have passed unnoticed by the students, had he not said in the course of his first disjointed remarks, 'I'm a little nervous, as you see.' But a patient was introduced, a diagnosis made, an operation decided upon, and a knife handed to Professor Little, and I can tell you (as you know) he was not nervous *then*."

To those of us who knew Little well, it was interesting to see this preliminary nervousness when a great operation was imminent. The quick, short steps, the restless tapping of the foot when he was preparing for his work, gave little promise of the bold, self-reliant man as he stood over the patient, perhaps reeking with the perspiration of surgical ardor, but yet with

steady, skilful hand working in a manner that convinced any one competent to judge, that a life given into his care would be preserved and returned, were it among human possibilities.

In Burlington as in New York, "Little's luck" became proverbial, for his operations, from causes that I am not able to analyze or define, were pre-eminently successful. A well-known surgeon in New York told me, in substance, that it was a prevalent opinion in St. Luke's Hospital, that it would be safe for Little to cut off a foot of an intestine, when another man could hardly touch it with a knife; and yet he was deferential to a fault to the surgical opinions of his peers, ready to adopt their suggestions, and to give proper credit for them. He was a man who exhibited great common-sense as a surgeon. He was not overtrained, but he knew how to get at the upshot of a case without being unduly anxious as to how Esmarch or Lister were doing that thing now.

Dr. Little's chair in the University of New York. was never fully satisfactory to him. His clinics there were held but for a part of the session, and he taught but once a week, although his classes were large, and the students, at least on one occasion, petitioned the faculty that his instructions might be continued throughout the session. The request could not be granted, on account of the pressure for time in which to give the whole curriculum. Three years after his

acceptance of the position, together with six members of the former post-graduate faculty of the University, he resigned, in order, in conjunction with them, to establish the *New York Post-Graduate Medical School.* To this institution he gave the same hearty effort that he displayed in Burlington. His lectures to graduates were, if possible, better appreciated than by the undergraduates whom he had instructed since his early manhood. A doctor was to him a brother. Without quite knowing it himself, he acted as if he supposed that every man who sought or had acquired the degree of M.D. was as eager and honest in the pursuit of knowledge with which to save life and mitigate disease as he was himself.

It is said that he always leaned toward the student, and possibly too much, when required to vote upon an examination in the faculty at Burlington. This was not from any idea of lowering the standard of proficiency, but because he could not be made to understand that there were men who regarded medicine as a business, in which they were willing to embark with as little capital as could make a fair show. During these last three years he exhibited his best qualities of faithful work, and if, as Dr. Lloyd, one of his former office students and valued assistants, says, "he was inclined to throw off his work on other shoulders, and less inclined to undertake long and serious operations," on account of some grave symptoms in his general health,

it was not apparent to those of his friends who saw him only at intervals. The last public work he was engaged in was a meeting of the Post-Graduate Faculty, on the evening of March 31st, when he appeared in his usual health and spirits. At that meeting an incident occurred which was characteristic of the man. He felt impelled by his judgment to vote, on a question which then came up, contrary to his feelings. It was a question that might affect the interests of some to whom he was attached, and after he had voted and was found to be in the majority, he expressed his regrets that he should be obliged to vote for a policy which might prove detrimental to the interests of a friend, and he vainly sought for a compromise upon the subject.

Dr. Little's services to St. Luke's Hospital were very great, and they were warmly appreciated by his patients, his colleagues, and the management. He served one term of ten years, from 1868 to 1878, when he was retired under the rules to be made a consulting surgeon. In 1882 he was reappointed an attending surgeon, and held the position until his death.

Little used to tell a story of an experience of his at St. Luke's, which well illustrates the maxim that "all men think all men mortal but themselves." He was to operate, on one afternoon, upon two cases for resection of the upper jaw. The first patient died upon the table from getting blood in the trachea, and

Little sent word to the survivor that he wished to postpone the operation for him. He was very much disappointed at the delay, and urgently insisted that Dr. Little should personally visit him in the ward and tell him why he did not wish to operate upon him as appointed. The surgeon accordingly went up, and with some hesitation, on account of the probable effect upon the hopes of the candidate for an exsection, frankly told him that the first man was dead, and he did not feel like going on with a case of the same kind just at the moment. But instead of being daunted the patient exclaimed, "Oh, that's nothing! I'm not afraid. The other man was a sickly fellow. I never thought he would get through. You operate on me, I won't die." As a matter of fact Little did soon operate upon him, he got no blood in his trachea, and he did not die.

In 1876 Dr. Little was appointed an attending surgeon to St. Vincent's Hospital, a position which he held when he died. Little always believed, that the kind offices of the Rev. Vicar-General Quinn, one of the managers of that hospital, were largely instrumental in securing him this position. The Vicar-General was a priest in the ranks when Dr. Little was house surgeon in the New York Hospital, and in his visitations to the sick and dying in the wards, had been struck by the commanding presence, the assiduous and faithful labors of the young surgeon.

Of Dr. Little's surgical achievements in detail, I am not competent to speak, nor is it necessary that I should do so. They are indelibly recorded in surgical literature—at least in part, for of late years Dr. Little was somewhat regardless, from lack of time, perhaps, from his large and exacting public and private practice, to write as much as his friends might have wished. But I may say that he was the first American surgeon to puncture the bladder with the aspirator, for the relief of retention of urine. He simultaneously ligated the subclavian and carotid arteries of the right side, for aneurism of the first part of the subclavian. The operation for stone by various methods he had performed seventy-seven times, with a fatal result in but two cases. In hare-lip and strangulated hernia he also had a large and successful experience.

He entered into the advances claimed to be made in antiseptic surgery with great enthusiasm, and on his last visit to Europe, at the meeting of the International Congress in London, he investigated Lister's methods very carefully, and came back to carry out all the details of Listerism in capital operations.

He was a surgeon who looked round upon a far horizon. Very few operations were foreign to his knife. Yet he was extremely appreciative of specialists, and while not needing their advice as much as some of those who have looked askance at them, he frequently sought their aid, and often publicly recog-

nized their value in enlarging the field of exact knowledge. He himself used the ophthalmoscope, the laryngoscope, and other means of examination not always used by general surgeons, so that he was singularly competent to make an examination in any surgical case. In the practice of medicine also—for he by no means confined his work to surgery—he was suggestive in the matter of treatment, and had many celebrated prescriptions upon which he drew with great readiness and accuracy.

Little was a great admirer of his instructor, Willard Parker. He gave his first-born the name of his preceptor. Dr. George Shrady styles him one of his worshippers. So great was this admiration when he left the hospital, that some of his friends feared he would be content to be an imitator and never strike out for himself. But he had Dr. Parker's art of making surgery fascinating to students; he drew them about him in great numbers. Even if the clinical material for his hour, on any particular day, was scanty, the lecture would not betray the want, for what was there was made the subject of homely but important lessons. The capacity for dignifying the everyday work of surgical practice, for making apparently minor things and details assume their true importance, belonged to him in a great degree. He could make a good clinic from material which some surgeons would not deign to spend a moment upon. Like Willard Parker also,

he attracted to himself numerous office students, who almost invariably became much attached to him.

Dr. Little was, in the good sense, a simple-minded man. He loved to sit down in such places as the office at the hotel in Burlington, and, as he became warmed in his discourse, talk to plain laymen, who understood but half of what he said, of tumors and ligations, of resections and ovariotomies, and all without any idea of boasting of his own deeds, for he had not the faintest resemblance to a braggart, but he was so interested in surgery that, like Agassiz, who talked about his study of the skeletons of fishes to stage-drivers, he fairly bubbled over upon the subject. He was fond of the meetings of the profession. Since its foundation, the New York Surgical Society was his favorite place for recounting his experience, and listening to the discourse of distinguished men who organized and maintained its body.

He was one of the signers of the address to the profession of the State against the re-enactment of the Old Code, and the movement to sustain the Medical Society of the State had his full sympathy and active coöperation.

Social to a degree, he could be found late in the afternoon, in the conversation-room or at the monthly meetings of his club, with a cigar for himself and his neighbor, ready to discourse upon any subject that was uppermost in men's minds.

He gave great thought and spared nothing in the education of his two sons and a nephew. He had almost exaggerated ideas of the importance to a young man of an exact and thorough course of study in a college. He did not practise his profession with an idea of amassing a fortune, but he conceived that it was better to thoroughly educate his sons, than to leave them the few dollars which a niggardly economy might have allowed a physician dying in middle life to put aside from his professional income. Before his death he had the great satisfaction of seeing his eldest son fully equipped and prosperously entered upon the practice of a lucrative profession. In his latter years he interested himself very much in the study of china and bric-a-brac. It became a recreation to him to visit auction rooms, and he often came away with a rare bit of some kind.

Galton describes a certain class of men as being incapable of advancing beyond a certain point in mental attainment, just as another class can only be developed physically to a certain inferior standard. Little was not one of these. As long as he lived he grew in mental capacity.

He was never satisfied with his own preparation for the study of medicine; but while he did not enjoy the advantages of a college training that he appreciated so highly in others, he had that which no conventional curriculum can of itself furnish—a receptive,

inquiring, and unbiased mind in science; and so to merely scholastic attainments he might have well said as did John Hunter, when he heard that he was reproached by a rival with being ignorant of the dead languages, "I would endeavor to teach him on the dead body that which he never knew in any language living or dead." It has been said by one biographer of Dr. Little that he was a typical American. It is certainly true that his career is a striking example of how eminence in our profession may be attained by the resources of our own country. His education was wholly obtained within his own city. He had none of the advantages so useful to the best of men, so without use to many, which are to be obtained in British or Continental schools. But no man more than he appreciated the labors of foreign surgeons and pathologists, no one followed more eagerly the medical literature of his time; but he was fortunate enough never to acquire such a slavish esteem for the opinions of books that he ceased to think for himself.

The sense of humor was fully developed in Dr. Little. From the busy, and sometimes weary life of a general practitioner, and from the society of his friends, he extracted much to give zest to his work. A joke at his own expense was almost as welcome as if at another's. He used to tell with great glee, and awakening much laughter as he did so, how a little trick of his to stop too prolix patients once got him

into great trouble. He said that he had found a good device for interrupting a needlessly long story on the part of a patient was to ask, in the midst of the long narrative, "Please let me see your tongue." He found that patients bore this interruption very well, and that in their eagerness to get the doctor's opinion of this index of the digestion, its wagging ceased. But on one evening a friend, who was in no sense a patient, was making a call upon him, and talked long, when Little was very tired. After a time, the doctor's mind wandered afar off from the discourse to the discussion of medical cases and questions, and, turning to his friend, who was in the full tide of talk, he asked with great gravity, "Please let me see your tongue." Little was never able to explain what happened when his friend had fairly taken in the meaning of this interruption.

But you will demand an end to this desultory contemplation of the varied sides of our late associate's life and character. A quarter of a century was to be the limit of his professional life. In the apparent ripeness, not of old age, but of middle life, it was ordered that his work should end. As has already been intimated, he was actively engaged at a professional meeting up to a late hour on Tuesday, March 31st, and on Saturday, April 4th, 1885, he was in the life beyond. In August, 1884, it was discovered that he was suffering from diabetes. I believe it is thought, by some authorities at least, that the debility induced

by this disease, the existence of which was shown by the examination after death, made him less able to resist the acute affection from which he died. At any rate it had a sensible effect upon his apparent feelings and actions as observed by his intimates. His thirst was marked, and he became much fatigued upon slight exertion. But he continued his daily work, without creating a suspicion of the exisence of any serious disease, in those who saw him only at intervals, until Wednesday morning, April 1st, when he called his friend Dr. Lloyd to his office, at about ten o'clock, and he found him with his head resting upon his hand, and complaining of a severe pain in the right iliac fossa.

He asked Dr. Lloyd to attend to his clinic for that day, while he proposed to make one or two calls in the afternoon. He then went upstairs and took a dose of medicine prescribed by himself. At noon he said he felt better, and he went out to try and finish some work; but he soon returned, complaining of severe pain. His family physician, Dr. John L. Campbell, was sent for in the evening; but although the most excellent medical advice was sought and obtained it was of no avail. When he found himself dying, he took his friend and pupil by the hand and said: "Lloyd, I am going now;" and a moment later, "I now realize the truth of what poor Beard said." * During all this

* This refers to the words of the late George M. Beard, in which he expressed his regrets that he could not express the thoughts of a dying man.

time he was sufferng intensely, but his mind was entirely clear, and his spirit undaunted by the fast approach of death. He summoned the household servants and family about his bedside, and casting anxious glances at a clock that was in the chamber, he plainly showed that he was counting the moments that he still had to live. Having bid farewell to each one by name, and with the words, "I die in the Christian faith" upon his lips, there was a final instant of distress, when this brave man yielded up his spirit to the God who gave it.

XI.

THE MEANS OF EFFECTING THE UNITY OF THE MEDICAL PROFESSION.

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Anniversary Discourse delivered before the New York Academy of Medicine, Nov. 15, 1888.

MR. PRESIDENT, FELLOWS OF THE ACADEMY, LADIES AND GENTLEMEN:

The acceptance of the honor conferred upon me by the Council of this Academy, for the second time, of preparing and delivering the anniversary discourse, brings with it retrospections and reflections that are at once tinged with sadness and illumined by cheer. Fourteen years ago, when, by your favor, I filled this place, a goodly list of honored names, which now is sadly broken, was upon our rolls. Austin Flint was the President, and besides him there were among the fellows Clark, Delafield, Hamilton, Van Buren, the Drapers (John William, and John C.), Elsberg, Krackowitzer, Paine, Post, Parker, Peaslee, Marion Sims, James R. Wood, Hutchinson, Little, Varick, Agnew, Loring, and many others, who have gone over to the majority. This array of the departed awakens in our

minds the saddest of reflections; but at the same time it stirs our loftiest feelings to think that our profession made for them an arena of intellectual and moral triumph, and that we have been at all worthy to be their associates. Although the Academy, with such membership, had a high position in medical circles throughout the civilized world, and was the medical association of the highest rank in our city, it then had no hall of its own, and held its meetings in the lower lecture-room of the college of Physicians and Surgeons, having just emigrated from the small chapel of the University. Its archives and library, whatever they were, or wherever deposited, were unknown to the average member, and were probably very rarely consulted by any one. Funds, except for annual expenses, the Academy had none, or next to none, although we were occasionally reminded by the not altogether social visits of the officers, that they were needed. The general professional interest in our work was not great, although the President has always been chosen from among our most public-spirited and distinguished Fellows. The attendance upon the general meetings was fairly good, and sometimes crowded. The printed Transactions show that the papers were usually of a high scientific character. There were scarcely any sections; the membership was about one hundred and sixty. During these fourteen years we have obtained a hall in a house of our own. We have

a library of no mean proportions, 30,000 volumes, and a reading-room richly supplied with American and foreign journals and magazines, while the sections, embracing nearly, if not every department of our science and art, vie with the general meetings in interest and attendance, and our membership is now nearly six hundred.

Besides these realizations, we meet to-night in the lively hope, thanks to the work of the President and Council, that not half the period over which my reminiscences extend shall have passed away, before from an awakened public interest in our profession in this city, we shall have rooms and halls in a building in some degree adequate to our needs, and somewhat proportionate to the professional position of the Academy, and to the power in the State which it represents. The names and portraits of some of those whose combined labors and generosity have brought the Academy of Medicine thus far, are upon our walls. Many of them are still with us. It is, then, with these reflections—those of cheer illuminating those of sadness, that I begin my discourse, jubilant with hope for this representative meeting place of a profession, which we may well believe is entering upon a future, whose greatness will be to its past, as is an interior to a threshold.

I would speak, so far as it is possible for me to do so, in the light of our best traditions and history, and

in the spirit of those who, having exhibited in life the highest type of their calling, have left behind them a durable impression upon our time. To continue their work in their aspirations, and to its legitimate ending, in greater power, is certainly the aim of the Fellows of this Academy. That they desired a united catholic profession, with one faith and a common altar, is beyond all question. The Latin motto over the executive chair indicates these aspirations.

If our profession were a united one, without sects in it, we should then be like the profession of law, whose members, however they may differ in opinions, ability or experience, have no qualifying or distinguishing prefix to indicate their mode of practice. There is no good reason that I can conceive of, why this condition of things should not obtain in medicine, and a member of this profession be simply a physician or a surgeon. But how far are we from this ideal! In this State, we have three distinct classes of physicians, besides a host of unclassified irregulars, not yet recognized by the Legislature, but having a more or less considerable influence upon the community. Such a condition is one far removed from unity, and yet the world admits that there is a force in union, that no individual energy can supply. A profession which comes in such intimate and vital relations to the welfare of the human race, as does ours, should not be

divided into conflicting parties, for there is but one science of medicine.

I think a little reflection will convince even those who may not as yet have given the subject any consideration, that the medical profession of this country does not, as a body, as an organization, or as a number of organizations—for the latter it really is—hold quite the same rank; does not have quite the same authoritative influence upon the public at large, as does the church, the law, or the press. From a certain point of view this may not at first seem correct. In what may be called private or personal relations no man is more potent than the physician. The family physician may well, and to his own advantage, compare his influence over his patients with that of the clergyman over his flock, the lawyer upon his clients, or the press upon its readers. Whether in the great city, in the gorgeous chamber of the rich, the top floor of the tenement house, or the wards of the hospital, or in the isolated dwelling of the prairie, the backwoods, or the mountain settlement, when with the suffering patient, even a look of the physician is almost omnipotent. No one may challenge his claim to headship there. Except that of a mother to her child, or a husband to the wife, there is no more powerful bond than this. But this, as I have indicated, is a personal and individual relation. It has nothing to do with the position of the medical profession as a body.

The day has gone, when the physician is to be regarded solely in this isolated relation, responsible and exalted as it may be. Not only has the specialist come, who, among the other asperities of his pathway, endures the consciousness that he has only a temporary acquaintance with his patient, which forbids the idea of any such confidence as that which is given to the family physician; but there is also the expert hygienist, who labors in boards and corporations for the prevention of epidemics and for their repression when they have arisen; the scientist in his laboratory, working at the great problem of the cause of disease; the medical chemist, the journalist, the teacher of anatomy and physiology, in fact, the great divisions of specialists, yet all members of the medical profession quite as much as the general practitioner. Thus the exigencies of the nineteenth century, with its telegraph, its railway, its phonograph and telephone, have divided this great profession, which, not so long time ago in England was only to be found in the apothecary and the barber-surgeons. My thesis naturally flows from these facts. We have been passing through a stage of disintegration, about which many have been unduly anxious, and many others witty, with their jibes at the allotment of the body in its various parts to the different specialists. There have been fears that the family practitioner had departed, never again to be a household god. Medical specialists have been even likened

to the gunmakers of Springfield, one of whom could make the hammer, another the barrel, while none of them was capable of producing the complete weapon.

As has often been clearly shown, specialism in medicine has never thus divided the profession into incapable component parts. The best specialists have always been made of the best general practitioners, and a good general practitioner has always been able to detect a danger which he may have felt necessary to ask a more experienced hand to avert. Each profession must take its turn in being a butt for ridicule. The modern Molières have not spared the modern doctors, and they have accused us of parcelling out the human body to different mechanics for examination and treatment. Yet we must admit, that just as society in the nineteenth century has not yet caught up with many of the changes induced by steam and electricity, and finds some of them inconveniences rather than blessings, in the same way the medical profession has not yet adapted itself to the apparent divisions in the activities of its members. The point of complete fusion has not been reached. We are the parts of a dissected map, not again put together, although a wise eye can detect our real unity. The times have not yet been ripe for the complete adjustment of the relations of specialism to general medicine, but they are fast becoming so, and we may safely leave that part of our former discords to the healing

influences of passing years. They are rapidly smoothing out all the inequalities in those relations.

It is of unity of a higher, or rather of a broader, character than that between specialism and general medicine that I would now speak. It is of a unity once existing but now lost, which allows all those who in any way by their work in life, either in studying the structure of the human frame, or the causation and nature of disease, are contributing to the mitigation or cure of physical suffering, to unite as members of the medical profession under the common name of physicians. In discussing the means for securing this unity, I shall consider only this State of New York. In studying its medical history and reasoning from it, I think we may find ample ground for the subject of this evening.

Although we may justly complain that we do not now possess the power that comes from union, and that we are thus made inferior to the profession in other countries, there is one advantage that we enjoy in America. Social position, the American doctor may have. If he does not, it is clearly a fault of his own, for our American system confers no degrees of nobility except such as are the spontaneous gift of the people. The exceptions to this rule are not numerous. Sometimes great riches give undue and unmerited prominence in society; but even in this case, unless the money is honestly earned or worthily inherited,

and used with liberality and friendliness to those less fortunate, riches confer no permanent prominence in any respectable circle in this country. The American doctor, like any other American citizen, however humble his origin, may enter any circle, where his abilities and character give him the right, as an equal.

The situation in some other countries is painfully different, and notably so in England, which in so many respects represents the highest type of our civilization, and yet where sometimes the stamp of the guinea is not on pure gold. A younger son of an English peer became enamored of medicine, and pursuing his studies obtained a qualification to practise. His family insisted that he must not practise in England, on the ground that an occupation of that kind was beneath his rank; but they consented that he should pursue his profession in a neighboring capital. Successful there, he enjoyed a large practice. But it was observed that his assistant always attended the family of his country's legation, and that he never personally prescribed for any of them. He himself gave as a reason for this, to an American medical friend, that were he to do so he would so lower his social position that he could not be invited to dine with his exalted countrymen. Were it necessary, incidents, known to many of us, could be told to corrobate the truth of this particular narration, and which would illustrate the correctness of this view of the social position of a Doctor in Medicine in Eng-

land. Many of us have heard a distinguished English surgeon express his surprise at the high position taken by American physicians in the society of their own country. It is certainly true that a practitioner of medicine in England, unless under exceptional circumstances, when the disability is in part removed by knighthood, does not rank as what they are pleased to call a gentleman. He even ranks below the lawyers, and meekly takes up the position assigned to him, and like the rest of the commonalty of that country, dearly loves a lord. Yet the position of the profession in England, on a scientific basis, is one of the most honored in the world. Many believe that, on the whole, it best represents the rank of our profession in the world, both by the reputation of its present members for scientific attainment and by its illustrious history.

My object in this allusion is simply to show that there exists no obstacle in our country that can prevent us from securing any position as a body, that our merits will justify. There are no lines of caste here, that prevent us from obtaining all our rights and privileges as a learned and philanthropic body. But as things are now, it becomes evident upon the most casual observation, and it has been repeatedly shown, that the medical profession as a body has no sufficient power or influence in many matters which should be absolutely under their control as in war are campaigns, once entered upon, under the direction of the com-

manding general. Only experts run engines by land or by sea. Bank presidents are not made of men unlearned in finance. Only scholars are professors of Latin or Greek. And yet private and public sanitary affairs, the prevention of epidemics, the government of hospitals, are very often directed, in whole or in part, by men of very good business, military, or mechanical training, but with no knowledge of medical matters, but sometimes with professed skill in dealing with a recalcitrant and impracticable medical man. Boards of Education, Boards of Health, sanitary legislation, are often conducted with but a feeble representation of medical men. When a doctor is appointed to a strictly medical position, requiring the highest type of medical learning and skill and experience, it is often because he is a man of attainments of a high order in petty politics, while his medical qualities are correspondingly low. This condition of things obtains because the people as a whole actually believe that the profession, as a profession, knows but little, if any more, about general sanitary matters or medical legislation than does a level-headed and successful banker, or railroad man, or a scientific plumber. We are divided into so many parties, each crying its shibboleth, that the public at large have at last come to think that however skilled a doctor may be in the management of a sick person or the direction of affairs in a house threatened or invaded by disease, he needs a good deal of lay over-

sight and repression, when he assists in the management of matters pertaining to public hygiene or health. Fortunately the United States Army and Navy have been trained to think differently; no such opinions are held there.

For this state of things, I, for one, have no fault to find with the sovereign people. Neither am I bringing any accusation against the press of our country, a power that does so much in leading public opinion. It is generally on our side in any matter where we represent the best interests of the country. The blame should fall in part upon the rapidly changing condition of things in our country, and in part upon ourselves. The fact is, that we have for some years demanded very little more of the State, than that we should be let alone. We have not until lately asked to have our laboratories or colleges endowed, even by individuals. We have assumed that our colleges are private institutions, in which no one but the students who attended them, and the professors who owned them, were at all interested. More than all, we have acquiesced in the taking away from us of privileges which formerly were conceded to us.

This brings me to the kernel of what I have to say. Our lack of unity depends not upon any want of social position, nor upon the estimate of us that the public have voluntarily assumed, but upon one that our own bickerings and quarrels have forced them to take. For

many years the profession in this State has been practically detached from the governing power. It has submitted to this, and instead of forming a part of the political commonwealth, it has chosen another way, one which has produced, and is producing, a pernicious state of things, harmful not only to the unity and honor of the profession, which this Academy represents, but what is far more important, to the community whom it serves.

When this century was young, the medical profession of this State was a united one. It was everywhere recognized as such. A doctor was a doctor, without any further definition. The first college that we had, the College of Physicians and Surgeons, was under the direction of the Regents of the University, and the members of the County Medical Society were its trustees. The idea had not then entered the mind of the medical profession that a medical college should be responsible only to its faculty, or that there could be three or four varieties of Doctors of Medicine. Until Samuel Thomson brought his botanic medicines, his steam and herb doctors from New England, there were but two kinds of doctors in New York—graduates of medical schools and licentiates, and they were allowed to practise only after a rigid examination.*

For nearly twenty years war was waged between

* The Status of the Medical Profession. By H. G. Piffard, M. D. D. Appleton & Co., 1884.

these graduates and licentiates, and Thomson's adherents, men of no strictly medical education, until, in 1827, the Legislature granted rights and privileges to the profession which, had it been tolerant and wise, we should have held until this day. To the State Medical Society was given the power, and the sole power, of regulating the standing of the profession in the State. The State Medical Society was a part of the legal organization that made up the State. Such a condition gave an excellent tone to the medical profession. It is true that medical science, as a science, had no such exalted position as it has now. The achievements which have produced anæsthesia, the thermometer, antiseptic surgery, and the various instruments to facilitate a thorough examination of diseased and healthy parts, were in the future; the bacteriological studies, now so full of promise, were unknown; medicine was given in cumbersome and distasteful forms; too little attention was paid to the natural course of disease; but we had men with great minds and with the *tactus eruditus*. We had a Romeyn, a Mitchill, a Mott, a Hosack, a Francis, and others who had set their stamp upon their day. The medical profession then kept step with the other professions and with the time in general influence, and its character as a body, it seems to me, as well as history and tradition tell it, was, if anything, higher, certainly as high as now. But not content with its high position as recognized by the

political power of the commonwealth, the medical profession undertook to repress opinion and practice as to the treatment of diseases. The heresy was not as to the ascertained facts in anatomy or physiology; it was not a question as to how the human body was consti tuted, as to what was the structure of the heart and liver, but as to what drugs were to be given in cases of ascertained disease, and as to what was the principle upon which they acted—heresy, in short, on subjects, however it may have been fifty years ago, in which there is no orthodoxy now. These new heretics were not like the Thomsonians, uneducated men, but trained in the same schools with other members of the profession, in good and regular standing in the County Societies, and under the protection of the law.

In 1842, in the pasturages of Orange County, the fight waxed so warm, that the County Society forbade a homœopathic physician from practising within its jurisdiction. This fatal step caused the persecuted sect to appeal to the Legislature, which not only deprived the County Societies from preventing those to whom they objected from practising, but also allowed anybody to practise who chose to call himself a doctor. This, to the whole profession and the community, was the opening of Pandora's box. Let it be granted that the theories of the heretics were absurd and their remedies at the most innocuous, what have become of many of the theories and some of the remedies of our

orthodox ancestors? The principle at the base of some of them and many of the remedies remain; enough, I think, to substantiate our claim to be the regulars, even if we are old school; but it has been demonstrated that much that we thought of the greatest importance was not so, after all, and that if we had allowed *similia similibus curantur* and the doctrine that the potency of drugs is increased with their attenuation, and that of the sole efficacy of vegetable medicines, and the vaunted virtues of cold water, to have the full swing, no one would have been the worse. —No one is harmed now, when the wildest theories and the most remarkable claims for medicines are advanced in the most sacred precincts of regular and old-school medicine, with no other punishment than merciless and destructive criticism.

Heresy-hunting is sometimes successful, but when the regular medical profession of the State of New York undertook the work of exterminating the followers of Hahnemann, they probably had little idea of what was before them. With the fervor of Puritans, and the chivalry of Cavaliers, our medical ancestors proceeded to cast out men educated in the same medical schools with themselves; men whose technical qualifications, whatever future generations may think of their judgment and their common-sense, were obtained at the same sources, and were presumably of the same quality as that of their persecutors. Their discontent with

some of the prevailing harsh and routine methods of treatment of their time, had led them to adopt the fantastical ideas of a theorist. They were sometimes violent and severe in their denunciations of the men who still walked in the old paths. It is no wonder that they were driven out. But expulsion was an unsuccessful way of dealing with them, unless it was desired to give them free scope and extended power.

The men who were expelled, not on account of the quality of their education, but because they flouted the old systems and advocated what the regulars deemed a fantastical one, appealed to the State. The State recognized them. A new Medical Society was formed. Then the Thomsonians, or Eclectics, as they choose to be called, took advantage of the amnesty now proclaimed by the Legislature for all irregulars. The deed was done. The once united profession, with ample provision for securing at least educated men for its practice, was now divided, and divided it remains to this day, with no standard as to what constitutes a Doctor in Medicine, except a very low and fickle one adapted to the requirements of the three State medical societies and the ten medical colleges of the State.

The medical colleges of the new schools were by no means as particular as to the qualifications of their graduates as were the old and regular ones, but their degree, in the eye of the law, became just as valuable. It conferred the same license to practise medicine.

This of itself caused a great deterioration in the quality of the profession. Many of the successors of the original homœopathic practitioners were by no means as well educated as were the originals, while as to the standard among the eclectics the least said the better. All this produced incalculable harm. The State had stepped in to actually lessen the requirements necessary to constitute a Doctor in Medicine.

It is now easy to see that no harm would have come from little pills, or vegetable remedies, or cold water, if absurd or heretical opinions had been treated as they are now treated, while the educational requirements for admission to the right to practise had been rigorously maintained. To insist upon attainments in the exact knowledge of the structure and functions of the human body in health and disease, together with ability to operate upon it in a skilful manner, is to remove all the danger that it is possible to remove from allowing men to care for the sick. But as a fruit of this crusade against heretical opinions anyone who can get a degree from a rigid or a lax medical school, or who can get a diploma which he has brought from some other county or State, endorsed by a college here, is allowed to practise medicine. In the earlier days we had censors chosen by the profession, who controlled the examination, and there was at least one standard made by independent men. These censors acted through the County Societies or the three or

four medical colleges of the State. To this system, but with much larger liberty of opinion, with absolute freedom of action in therapeutics and theories of the action of remedies, we must return. The State must concern itself, through its properly chosen agents, to know that those who are licensed to practise medicine shall know both the structure and action of the different parts of the human body, the methods for saving life and restoring functions by surgical operations, and the antidotes for active poisons. It must ascertain that those whom they allow to prescribe for the sick have availed themselves of opportunities for studying disease. Beyond this, the State may certainly allow complete freedom.

There are those who look forward to a day when the standard shall be much higher than this. They lay great stress upon what is called an academic education, such as is indicated by having a degree of Bachelor of Arts from an American college. With this view I have no sympathy. Whether or not the college course of our country needs great modification for those who study theology or law, or who become journalists, may be an open question. But the present system, even when modified by elective courses, is not fitted for future doctors in medicine. It is a great waste of time, in my opinion, to cause a young man who proposes to study medicine, to spend four years in an undergraduate college, in the studies in which the ordinary college

student is engaged. Two years, bringing the student up to the junior year, are important and sufficient for him. Then his university life should begin. Some day, our colleges, instead of expanding into so-called universities, will take what are only apparently backward steps, and become colleges, and let their young men out with two years less of Greek and Latin and then send them to real universities. The Alumni and Professors of undergraduate colleges are still as a body unprepared to accept this view. They consider those who hold it as enemies of sound learning. But, finally, President Barnard will have many followers. Our small colleges will become like the German Gymnasia and carry a student through the essential part of a classical training and mathematics, while the great colleges like Columbia, Princeton, Yale, and Harvard will be universities, where young men may enter directly upon professional and post-graduate studies. Students now enter our colleges too late and stay too long, if the profession of medicine is their goal. Until these reforms are brought about, those who wish to study medicine should either enter scientific schools as soon as their preparatory studies are over, or leave the colleges as now constituted at the end of the second year. But this is an incidental subject, for the introduction of which I almost beg your pardon.

There are still those, however, in our profession who make uniformity of opinion on matters of drugs,

their doses, their uses, and the principles upon which they act, a very serious matter. For example, at a meeting of a regular State Medical Society, during the heated term, a member read a paper in which he advised that "every homœopath should be hung till he was dead three times."

I once heard a zealous French Republican remark that France would only become a Republic, when every Orleanist, every follower of Henry V., and every Bonapartist, to the remotest branch of the various pretenders, were gathered in one place and blown up with dynamite. I admit that this is the true method, if we really wish to effectually stamp out heresy and obstinate public opinion. The history of the world shows that while banishment has generally, if not always, proved to be ineffectual, universal killing has been found a successful method in some countries of dealing with heretics and their opinions. But we must be sure to kill them all, and not leave any for the propagation of a future race. As we can hardly expect the State, with its present ideas, to adopt this view of its duties of regulating the practice of medicine, we are compelled to seek some other method of securing unity in the profession. Then, again, we find it more difficult than did our fathers to determine where heresy begins. Shall we say that a medical man is unfit for professional association because he brings himself to believe that scarlatina

can be checked by infinitesimal does of belladonna or that quinine or antipyrine will cut off typhoid fever, or that electricity will cure cataract, or sulphide of calcium will abort inflammation, any one of which opinions is resolutely held by well-educated and experienced men, and as firmly denied by others. It is impossible to deal seriously with those who would drive out men from a learned profession, not because their attainments are insufficient, or their moral character defective, but because they are believed to hold erroneous notions in the materia medica and in therapeutics. As Schiller says: *Mit der Dummheit ist nicht zu kämpfen.* We must leave our honest but bloodthirsty friends, with their beliefs as to the true way of dealing with error, to their ultimate correction when they finally learn that not all of wisdom shall die with us, even if we are the people. Their intolerant notions will ultimately repose in the same limbo with those of the hobbyists, with their panaceas for the incurable, and their exact knowledge on things in which there can as yet be no exactitude—a limbo crammed with the humbug of ages.

It ought to be said, however, in extenuation of the want of wisdom of our revered fathers in this matter, that they verily believed they were doing God service, as much as Paul, when he was haling men and women and bringing them bound to Jerusalem, because they accepted the doctrines of the Narazene. The ani-

mosities of our profession have passed into the proverbs of the language. A recent English critic says that he has known excellent men "grow white with rage in defence of vivisection," and he explains that "doctors are peculiarly liable to this kind of fury, because they are protecting human life, and feel that a mere blunder in theory may involve a sort of murder, and that, too, on a large scale." *

But what is the remedy for the present disunited condition of our profession in this State? This remedy is to be found in making—not a common standard for the degree of Doctor in Medicine, but a common standard for the license to practise medicine. That should be conferred, as now, by each college according to its own ideas as to what constitutes a sufficient education for the honor. But the liberty to practise medicine should not longer be left in the hands of bodies, however respectable and however distinguished, who are actually only responsible to themselves. During the past few years, after a most thorough discussion, carried through several sessions, the principle of this statement has twice in succession been unanimously approved by the oldest Medical Society of this State. The last President of this Society, Dr. Loomis, in his inaugural address advised the Committee on Legislation to urge the passage of a law for a State Board of Examiners, on the late Legislature, and if unsuccess-

* The Spectator, London, October 20, 1888.

ful, upon succeeding Legislatures "until it shall become law of the State." Only lately the member of the bar, who of all others has given by far the most attention to medical legislation, has announced himself * in an address as an advocate of such an Examining Board. There is only a single authority on medical education in our State who, so far as I know, openly opposes such a law. Dr. Austin Flint says on this subject: "State medical boards, appointed to determinate by actual examination the qualifications of applicants for license to practise medicine, can never be of any great practical benefit so long as it is deemed necessary to recognize in their organization certain so-called systems of practice, such as homœopathy and electicism." †

There are homœopaths and electics in Canada, in Illinois, and in Virginia and Alabama, where such a system as the State Society of New York advocates is in full action, and yet no practical difficulty, but the greatest benefit, has been found in the operation of the law. There is no longer any opposition to the system on the part of our profession in our State, but the proposed law gets no further in the Legislature than to be sent to a committee, when a dispute occurs to the ratio of representations on this proposed board, or some other minor point. This discussion gives our

* W. A. Purrington.

† College and Clinical Record, vol. ix., May and June, 1888.

law-makers an opportunity, of which they are not slow to avail themselves, to lay the whole subject on the table until the doctors can agree.

In the course of some remarks upon this subject in the State Society some years ago, the President of this Academy predicted that the people themselves would some day demand the establishment of such a system, and then we should have it. It is with a view of informing some of the influential and conscientious members of the community in this State, as to the needs of the profession and through them the public, on this subject, that this discourse has been written. Not many years since the people demanded that the privilege of entering the legal profession directly from a law school, without an examination by the courts, should be abolished. The law-schools of the State are only two in number; they are irreproachable in reputation, and no glaring, perhaps no improprieties at all, existed in their management. But the legal profession, and through them the public at large, grew jealous of any liberty to enter the profession other than that granted by an examination by an independent board constituted by the court. This kind of an examination the professors of a law-school, however ably conducted, however endowed by individuals or corporations, could not furnish. As I have already said, in the State of New York if a man or woman receive a degree of Doctor in Medicine in one of the regular

chartered medical colleges of the State, he or she may practise medicine here without further leave or license. Those who come from other countries and other States must have a diploma from some regularly chartered college, and this must be endorsed by one of the colleges of this State. The number of men who acquired the right to practise medicine as they may, by passing the examination of the Regents of the University and by license from the censors of County Medical Societies is so small, that they may be left entirely out of consideration.

It is thus seen that the colleges, and one college equally with another, has the power of determining who shall practise medicine. The standard of attainment required by these various colleges, in this State varies exceedingly. Not one of them, moreover, separates the matter of granting degrees entirely from the instruction. With this I have no quarrel. Those who have instructed the men are, on the whole, altogether the most suitable persons to determine their qualifications for a degree. But after they have determined this to their satisfaction, and conferred the degree, the State should step in and say, "in behalf of the people, we will now decide whether the possession of this degree gives you the general knowledge required by the standard which the State thinks requisite for a license to practise. If the army and navy, if the hospitals will not accept the fact of the possession of a degree as

sufficient, neither will we." Certainly the physical welfare of the men and women and children of the State requires as much supervision and solicitude as the soldiers and sailors and the inmates of hospitals. These medical colleges of this State, as everybody knows, are, for the greater part, of the most respectable kind. The education that may be obtained in them is of the highest quality. The ablest men in the profession are in the faculties. Until within a few years an excessively large proportion of the scientific work of the profession, work that is always of ultimate value to the patient, was done by the professors and instructors in these institutions. The well-substantiated renown of American medicine, a renown that causes its literature to be translated into every civilized tongue, and its great workers to be everywhere recognized, is chiefly to be ascribed to these colleges. Even now, when professional activity is much more widely diffused and better organized outside of the colleges that grant the degree of M.D. than ever before, these institutions continue to do their work as well or better than ever; and yet but very few large hospitals will give one of their graduates an opportunity to practise in them, even in a subordinate way, without first subjecting him to a more or less rigorous examination, conducted by the medical officers of the hospitals. I have known one instance, at least, where three candidates for one vacancy were rejected, and the hospital

sent out for other candidates to come before them. Not one of these young graduates is allowed to practise among the soldiers of the United States Army, or the sailors of the United States Navy, until he has passed another examination by their medical officers; and, as a matter of fact, a large proportion of those who attempt to pass this latter examination are found incapable.*

Yet the State of New York gives this Doctor in Medicine the right to practise without further question. It says, by inference, "Although many of you are not qualified to enter a civil hospital, and treat the patients there, even when your work is carefully supervised by men of experience; although very many of you are not fit to have the care of sick or wounded soldiers or sailors, yet all of you, wherever you can find an opportunity in our borders, may engage in private practice without any independent supervision." It is willingly conceded that in some departments of medical practice no such high grade of qualification is required as should be among the picked medical officers of the army or navy. But investigation shows that these graduates of medical colleges are not rejected by Army and Navy Medical Boards because they are deficient in the highest departments and the non-essentials of medical knowledge, but because they do not know the antidotes

* During a time of peace, however, the best men of the colleges do ot generally compete in these examinations.

for poisons, because they do not know how to set a broken arm or leg, how to tie an artery or dress a wound, how to rescue a person from drowning, above all how to recognize a common disease. Certainly the State should restrain mad dogs from running at large, and regulate the storage of gunpowder. The State may certainly not concern itself to know whether a doctor knows the French language or the fundamentals of geology; but it should know whether a licensed practitioner can really practise whatever would be everywhere conceded as the essentials of his art.

Such a board would not create a revolution. But it would do something to protect the community from the dangers of ignorance in the essentials of the practice of medicine on the part of those who assume to take care of their health. As things are now, the most of those who receive the degree of M.D. would easily pass the State examination. But a dangerous few would be thrown out. Such a system once established, and sects in medicine would soon be practically destroyed. There would be a common standard of fitness based upon a knowledge of the structure of the body and the recognition of disease. Differences in the modes of treatment might safely be left to themselves, were we once assured that all practitioners were qualified in essentials. One of the medical orators and a Vice-President of this Academy, at the opening of the new College of Physicians and Surgeons lately, said:

"It is a melancholy but indubitable fact, that the standard of medical education in this country is far below that of England and the Continent of Europe." *

I do not believe that this lowering of the standard of what may be called the general average of medical attainment in this country is due to the fact that many of our Doctors, more than half of them, are not Alumni of undergraduate colleges, and are deficient in Latin and Greek, but because many of the medical colleges have not sufficiently instructed them in anatomy and physiology, in medicine and surgery, and good habits of observation. It is not so much in the preliminary as in the professional training that great deficiencies have occurred. The terms have been too short, and in many instances the degrees have been too readily granted. I am not aware of a civilized country but our own, where irresponsible medical schools are allowed to determine the right to practise medicine. It is due to this condition of things that the qualification of the average doctor in medicine abroad is higher than ours.

When a medical congress meets in Amsterdam or Copenhagen or Brussels, there is no difficulty in the enrollment of physicians. If a man has a qualification, he is enrolled. But when one meets in Philadelphia or Washington, how different. A great many things must be inquired into, until assurance is had that the degree represents what it assumes to. Where is the

* W. H. Draper.

college that grants it? How long is its course? Are its candidates properly examined? In short, to say that a man possesses a degree from a regularly incorporated college in this country, by no means determines that he is deemed a fit associate in a learned body devoted to the consideration of medical subjects. It is true that considerations as to the belief in so-called dogmas are sometimes made grounds for exclusion here; but the fact remains, that the American standard of essential knowledge is far from being uniform, and is generally too low, and that for this reason much more and closer scrutiny of what is technically called a medical qualification, must be made here than in a European State. It conveys no such assurance, when found in the hands of a medical man in this country as it does abroad, that we are dealing with a reasonably well-informed doctor in medicine. Now that it has been practically settled by the voice of the profession that they desire the protection of the community by a change in our laws—such a change as will cause all who in future desire to practise medicine in our State to pass a common examination and come up to a common standard—I have taken the opportunity afforded me by the invitation to this discourse, which is, by a by-law of the Society, devoted to the laity as well as to my brethren, to attempt to influence the public at large, to unite with us in securing a law constituting a Board of Examiners for the license to practise medi-

cine. I believe, with our President, that without your sympathetic and active co-operation the accomplishments of such a reform will be impossible. But when you see your way clear to demand it of our legislators, they will comply, and that speedily.

Such a law will in time effect the unity of the medical profession and greatly increase its beneficent power. This latter effect is certainly desired by every citizen. If it can be demonstrated to you that under a new system of admission to the practise of medicine, increased confidence in the average medical adviser will arise, and that you will be actually safer in limb and health, no further argument will be needed. To those who believe in gifts of healing in the nineteenth century, and in the power of the seventh son of the seventh son, and to the devotees of the faith and mind cure, no argument can be effectual. But to those who believe that the possession of a certain number of the facts in what is called medicine, is a necessary prerequisite to a right to practise; that a man should know the anatomy of the human stomach for example, before he puts drugs in it, the situation of a blood-vessel before he tries to tie it, that he shall be able to distinguish pneumonia from peritonitis; I confidently appeal for a law that shall allow no one to practise until a proper and independent authority has determined that such facts have been learned by the candidate.

As I have intimated, as a minor but not unimpor-

tant consideration, such a law will break up the odious scandal that has so long been so abhorrent to many outside of our profession, of so-called different schools in the treatment and care of the sick, standing apart from each other, or retreating in the face of a common enemy. Let us educate all medical men up to a common standard, and then all difficulties in the way of relations with each other over the patient will vanish. This proposed law will also cause a more general interest in seeing that the proper facilities for the study of medicine are amply furnished. Our colleges, our laboratories, our centres of instruction will become not isolated, but general objects for private benevolence and philanthropy. There is really no subject in which the community at large has a more vital interest than the quality of its medical men. Except an occasional railer at our impotence, who mourns what we cannot compass the infinite and cause men and women to avoid the awful but irrevocable truth, "Whatsoever a man soweth, that shall he also reap;" everyone realizes, that physicians are important as individuals to the general public, but it is for our recognition as a great factor in the various parts that make up the edifice that we call the State, that I plead. Through such a recognition with its accompanying supervision, although not in the absolute and paternal way of unrepublican, or, rather, of unconstitutionally governed

countries, your safety and care as individuals will be better assured.

In one of the first months of the War of the Great Rebellion, a squadron of United States cavalry was galloping at night through the lanes of Northern Virginia. A young medical officer rode beside the captain. Suddenly, as evidence of a hostile force in ambush reached the trained eye or ear of the officer in command, a man of long experience among the Indians of the frontier, there came the order "Halt!" After some hurried directions to the orderly sergeant, he concluded, "Put the doctor in the centre; we may need him." So I ask you, while the physician shares with you the perils and vicissitudes of life, care for him and his class, put him in the centre, safe from needless injury and unwarranted peril, and where he may, to his capacity and in the proper time, help to maintain and preserve the commonwealth.

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